

Final

Environmental Assessment

Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base



**Department of the Air Force
Air Education and Training Command
325th Fighter Wing
Tyndall Air Force Base, Florida**

May 2008

Printed on recycled paper



Report Documentation Page			Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE MAY 2008		2. REPORT TYPE		3. DATES COVERED 00-00-2008 to 00-00-2008	
4. TITLE AND SUBTITLE Final Environmental Assessment: Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) CH2M Hill,9191 South Jamaica Street,Englewood,CO,80112			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 82	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

FINAL

Finding of No Significant Impact Finding of No Practicable Alternative for

Replacement of Subscale Drone Recovery Boat Dock at Tyndall Air Force Base

AGENCY: Department of the Air Force, Air Education and Training Command, 325th Fighter Wing, Tyndall Air Force Base (AFB), Florida.

BACKGROUND: The 53rd Weapons Evaluation Group (WEG) proposes to replace one of the existing subscale drone recovery boat docks at Tyndall Air Force Base (AFB) to better support the Air Force Subscale Aerial Target (AFSAT) program. During aquatic recoveries of drones, the drone is retrieved from the water by the Missile Retriever (MR) boat and is transported by the MR boat to the Drone Water Recovery Center (DWRC) docking facility. The drone recovery dock proposed to be replaced at the DWRC docking facility is deteriorated and damaged beyond repair due to the effects of old age, salt, and hurricanes. In addition to its poor condition, the dock is undersized for adequate docking of the MR boats.

PROPOSED ACTION AND ALTERNATIVES: Under the Proposed Action, the existing drone recovery dock, which measures 8 feet (ft) by 100 ft, would be demolished and a new dock measuring 14 ft by 120 ft would be constructed in the same location. The existing dock would be disassembled in pieces as much as possible. No explosives would be used during the demolition and no dredging would be conducted during demolition or construction. The portions of the dock piles above the sea floor would be removed and the portions of the piles below the sea floor would be left in place. The new dock would have a total of 33 wood bent piles and 12 wood fender piles. The piles would extend a minimum of 20 ft below the sea floor. The dock would have wood decking and a row of aluminum lamp posts on each side. A fiberglass fuel pipe would be extended from an existing diesel fuel tank at the DWRC facility along the seawall to the dock. The Proposed Action would not involve any modification to the existing seawall or pavement of the DWRC facility. The only action proposed landward of the seawall is the replacement of the existing chain-link gate that controls access onto the dock.

Based on engineering analyses, the drone recovery dock is deteriorated beyond repair. Because repairing the dock is not technically feasible, it is not a reasonable alternative to the Proposed Action. All existing docks at Tyndall AFB outside the DWRC facility are structurally inadequate for the MR boat, and their use would result in land-use incompatibilities. The use of an existing dock, or the construction of a new dock, outside the DWRC facility would also create operational inefficiencies because all personnel, equipment, and other resources associated with aquatic drone recovery operations, including repair and maintenance of the MR boats, are located at the facility. These alternatives would negatively impact the AFSAT program and, therefore, do not meet the purpose and need for the action. Under the No Action Alternative, the existing drone recovery dock would not be demolished or modified in any manner, and a new drone recovery dock would not be constructed.

SUMMARY OF FINDINGS: Based on the findings of the EA, the Proposed Action would have no effect, or negligible impacts on land use, topography, groundwater, floodplains, vegetation, listed species, housing, schools, recreation, energy, potable water, wastewater, Air Installation Compatible Use Zone program, cultural resources, and environmental compliance. The Proposed Action would have minor impacts on air quality, noise, geology/soils, surface water, wetlands, fish/wildlife, traffic flow, and socioeconomics. The impacts that the Proposed Action would have on these resources would not be significant and would not require mitigation. Minorities and low-income residents living in

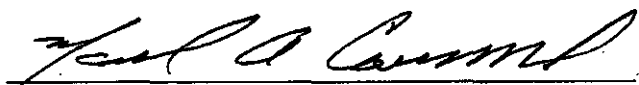
proximity to the Proposed Action would not be disproportionately impacted. No adverse cumulative impacts would occur when the Proposed Action is combined with past, present, or reasonably foreseeable actions.

The proposed replacement of the existing drone recovery dock would occur within jurisdictional wetlands/surface waters. To minimize the impact to wetlands/surface waters, the new drone recovery dock proposed to be constructed has been sized only to the extent needed to meet the minimum docking requirements of the MR boat. To minimize the overall footprint of the project, no ancillary facilities are proposed over water or on land. The Proposed Action would be conducted in compliance with applicable state and federal regulatory permitting requirements. The project would be implemented in strict compliance with the conditions specified in the respective permits, in coordination with Tyndall AFB natural resources staff, and in accordance with all Tyndall AFB environmental plans and policies pertaining to the protection of wetlands/surface waters. The No Action Alternative would have no effect on any environmental resource. However, the No Action Alternative would not allow the WEG to replace a dock that is inadequate; therefore, it would not support the WEG's mission requirements associated with aquatic drone recoveries.

SUMMARY OF PUBLIC REVIEW AND INTERAGENCY COORDINATION: A 30-day public review period was held October 25 - November 23, 2009 to solicit public comments on the draft EA. No public comments were received during the public review period. Copies of the draft EA along with Tyndall AFB's own Florida Coastal Management Program (FCMP) consistency determination were sent to the Florida State Clearinghouse to obtain the state's FCMP consistency determination for the Proposed Action. The State determined that the activities under the Proposed Action are consistent with the FCMP.


Correspondence letters and copies of the draft EA were sent to the U.S. Fish & Wildlife Service, National Marine Fisheries Service, and to the Native American tribes that have expressed an interest in Tyndall AFB for their ancestral ties. Based on the comments received, the federal agencies and the tribes find that the Proposed Action would not adversely affect resources that are of concern to them.

FINDING OF NO PRACTICABLE ALTERNATIVE: Pursuant to Executive Order 11990, and considering all supporting information, I find that there is no practicable alternative to the Proposed Action being sited in a wetland as described in the attached EA. The attached EA identifies all practicable measures to minimize harm to the existing environment.


MARK A. CORRELL, Colonel, USAF
The Civil Engineer
Headquarters Air Education and Training Command

12 MAR 10
Date

FINDING OF NO SIGNIFICANT IMPACT: Based on my review of the facts and analysis in the EA, I conclude that the Proposed Action will not have a significant impact either by itself or considering cumulative impacts. Accordingly, the requirements of the National Environmental Policy Act, the Council on Environmental Quality Regulations, and 32 Code of Federal Regulations 989 have been fulfilled, and an Environmental Impact Statement is not required and will not be prepared.


BRADLEY K. MCCOY, Colonel, USAF
Vice Commander, 325th Fighter Wing

15 APR 10
Date

Table of Contents

<u>Section</u>	<u>Page</u>
Table of Contents	iii
Acronyms and Abbreviations	vi
1. Purpose of and Need for the Proposed Action	1-1
1.1 Introduction.....	1-1
1.2 Purpose and Need	1-1
1.3 Location of the Proposed Action	1-2
1.4 Applicable Regulatory Requirements	1-2
1.5 Consultation Requirements	1-6
1.5.1 Coastal Zone Management Consistency	1-6
1.5.2 Regulatory Agency Consultation.....	1-7
1.5.3 Native American Tribal Consultation	1-7
1.6 Public Involvement	1-8
1.7 Scope of the Environmental Assessment	1-8
1.8 Organization of the EA.....	1-9
2. Description of the Proposed Action and Alternatives	2-1
2.1 Alternatives Development	2-1
2.2 Alternatives Considered but Eliminated from Further Study	2-2
2.3 No Action Alternative.....	2-2
2.4 Description of the Proposed Action.....	2-2
2.5 Identification of the Preferred Alternative.....	2-3
2.6 Summary of Environmental Consequences	2-6
3. Existing Conditions.....	3-1
3.1 Air Quality.....	3-1
3.2 Noise.....	3-1
3.3 Geology, Topography, and Soils	3-2
3.4 Water Resources	3-3
3.4.1 Groundwater.....	3-3
3.4.2 Surface Water.....	3-3
3.4.3 Floodplains	3-4
3.5 Biological Resources.....	3-4
3.5.1 Wetlands	3-4
3.5.2 Vegetation.....	3-6
3.5.3 Fish and Wildlife	3-6
3.5.4 Listed Species.....	3-7
3.6 Land Use	3-9
3.7 Transportation	3-9

3.8	Environmental Compliance	3-10
3.9	Cultural Resources	3-10
3.10	Socioeconomics	3-11
3.11	Environmental Justice	3-12
4.	Environmental Consequences.....	4-1
4.1	Air Quality	4-1
4.1.1	Proposed Action	4-1
4.1.2	No Action Alternative	4-1
4.2	Noise.....	4-1
4.2.1	Proposed Action	4-1
4.2.2	No Action Alternative	4-2
4.3	Geology, Topography, and Soils	4-2
4.3.1	Proposed Action	4-2
4.3.2	No Action Alternative	4-2
4.4	Water Resources	4-3
4.4.1	Groundwater.....	4-3
4.4.2	Surface Water	4-3
4.4.3	Floodplains	4-3
4.5	Biological Resources.....	4-4
4.5.1	Wetlands	4-4
4.5.2	Vegetation.....	4-4
4.5.3	Fish and Wildlife	4-5
4.5.4	Listed Species	4-5
4.6	Land Use	4-6
4.6.1	Proposed Action	4-6
4.6.2	No Action Alternative	4-6
4.7	Transportation	4-6
4.7.1	Proposed Action	4-6
4.7.2	No Action Alternative	4-6
4.8	Environmental Compliance	4-7
4.8.1	Proposed Action	4-7
4.8.2	No Action Alternative	4-7
4.9	Cultural Resources	4-7
4.9.1	Proposed Action	4-7
4.9.2	No Action Alternative	4-8
4.10	Socioeconomics	4-8
4.10.1	Proposed Action	4-8
4.10.2	No Action Alternative	4-8
4.11	Environmental Justice	4-9
4.11.1	Proposed Action	4-9
4.11.2	No Action Alternative	4-9
4.12	Cumulative Impacts.....	4-9
4.13	Mitigation Measures	4-10

5.	List of Preparers	5-1
6.	List of Persons and Agencies Consulted.....	6-1
7.	References	7-1

List of Appendixes

Appendix A:	Coastal Zone Management Consistency Determination	A-1
Appendix B:	Regulatory Agency and Native American Tribal Correspondence	B-1
Appendix C:	Public Involvement	C-1

List of Tables

<u>Number</u>		<u>Page</u>
Table 1-1	EA Organization	1-9
Table 2-1	Summary of Environmental Consequences	2-6
Table 3-1	Typical Noise Levels for Outdoor Construction	3-2
Table 3-2	Listed Plant and Animal Species Documented at Tyndall AFB or in its Immediate Vicinity	3-7
Table 3-3	Race, Ethnicity, and Poverty Demographics by Percentage of Population	3-13
Table A-1	Coastal Zone Management Consistency Determination.....	A-1

List of Figures

<u>Number</u>		<u>Page</u>
Figure 1-1	Vicinity Map	1-3
Figure 1-2	Base Map	1-4
Figure 1-3	Location of Proposed Action.....	1-5
Figure 2-1	General Design of Alternate Drone Launch system	2-4
Figure 2-2	Configuration of Clear Area Footprint and Rail Track	2-5
Figure 3-1	Natural Features of Proposed Action Site.....	3-5
Figure 3-2	Census Tract Locations	3-14

Acronyms and Abbreviations

ACM	asbestos-containing material
AETC	Air Education and Training Command
AFB or Base	Tyndall Air Force Base
AFI	Air Force Instruction
AFPD	Air Force Policy Directive
AFSAT	Air Force Subscale Aerial Target
AICUZ	Air Installation Compatible Use Zone
ARPA	Archaeological Resources Protection Act
BG	Block Group
bls	below land surface
BMP	best management practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CES/CEV	Civil Engineer Environmental Flight
CES/CEVN	Civil Engineer Environmental Flight Natural Resources Element
CFR	Code of Federal Regulations
CO	carbon monoxide
CT	Census Tract
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dBA	decibels on the A-weighted scale
DNL	Day-Night Average A-Weighted Sound Level
DoD	Department of Defense
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FCMP	Florida Coastal Management Program
FDACS	Florida Department of Agriculture & Consumer Services
FDEP	Florida Department of Environmental Protection
ft	feet
FEMA	Federal Emergency Management Agency
FFWCC	Florida Fish & Wildlife Conservation Commission
FIRM	Flood Insurance Rate Map
FNAI	Florida Natural Areas Inventory
FONPA	Finding of No Practicable Alternative
FONSI	Finding of No Significant Impact
HAZMO	Hazardous Materials Management Office
ICRMP	Integrated Cultural Resources Management Plan

IRP	Installation Restoration Program
LBP	lead-based paint
mmBTU/hr	million British thermal units per hour
MOA	Memorandum of Agreement
MSA	Metropolitan Statistical Area
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NO _x	nitrogen oxide
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWFWMD	Northwest Florida Water Management District
NWI	National Wetlands Inventory
O ₃	ozone
Pb	lead
PM ₁₀	particulate matter less than or equal to 10 microns in aerodynamic diameter
PM _{2.5}	particulate matter less than or equal to 2.5 microns in aerodynamic diameter
POL	petroleum, oil, and lubricant
RATO	Rocket Assisted Take Off
RCRA	Resource Conservation and Recovery Act
sf	square feet
SHPO	State Historic Preservation Officer
SO ₂	sulfur dioxide
SOP	Standard Operating Procedure
SO _x	sulfur oxide
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish & Wildlife Service
VOC	volatile organic compound
WEG	Weapons Evaluation Group

SECTION 1

Purpose of and Need for the Proposed Action

1.1 Introduction

The 53d Weapons Evaluation Group (WEG) proposes to construct and operate an alternate system at Tyndall Air Force Base (AFB) for launching BQM-167A subscale aerial target drones to support the Air Force Subscale Aerial Target (AFSAT) program. The BQM-167A subscale aerial target drone is used by the Air Force to test and develop various types of weapons systems. An alternate drone launch system is needed to alleviate the operational problems and reduce the high costs associated with the existing system. The proposed system would be constructed adjacent to the drone launch facility, which is located just off U.S. Highway 98 southeast of the Base airfield.

The 325th Fighter Wing, Tyndall AFB, with the support of the Air Education and Training Command (AETC), has prepared this Environmental Assessment (EA) for the Proposed Action of constructing and operating an alternate drone launch system at Tyndall AFB. This EA assesses the potential environmental impacts associated with the Proposed Action, as well as those associated with the No Action Alternative, as described in Section 2. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA), Air Force implementing regulations (32 Code of Federal Regulations [CFR] Part 989), and DoD directives.

1.2 Purpose and Need

The purpose of the Proposed Action is to provide the 53 WEG an alternate drone launch system at Tyndall AFB to alleviate the operational problems and reduce the high costs associated with the existing system. The 53 WEG experiences numerous launch-phase problems when operating the existing system. Specifically, drone launches are extremely unstable due to the limited initial guidance provided by the existing system. Launch trajectories are also very sensitive to the installation angles of the Rocket Assisted Take Off (RATO) bottles, which provide the initial lift and thrust necessary for the drone to reach a velocity that is sufficient enough for its propulsion system to sustain flight. Such launch phase problems have resulted in four test failures and the destruction of three target drones to date. Moreover, RATO bottles can be used only once and are very expensive, each costing approximately \$25,000. The proposed alternate drone launch system would allow more accurate and controlled drone launches and would eliminate the need to use RATO bottles. By alleviating the operational problems and high costs associated with the existing drone launch system, the Proposed Action would improve the ability of the 53 WEG to carry out its mission functions at Tyndall AFB.

1.3 Location of the Proposed Action

Tyndall AFB is located approximately 13 miles east of Panama City in the southeastern corner of Bay County, Florida (Figure 1-1). The Base is approximately 18 miles long by 3 miles wide, and encompasses nearly 30,000 acres on a peninsula that is surrounded by the waters of the Gulf of Mexico to the south, St. Andrews Bay to the west, and East Bay to the north. U.S. Highway 98 runs through the peninsula, dividing the Base into north and south segments. The drone launch facility is located just off U.S. Highway 98 southeast of the Base airfield (Figure 1-2). The proposed alternate drone launch system would be located adjacent to the eastern side of the drone launch facility (Figure 1-3).

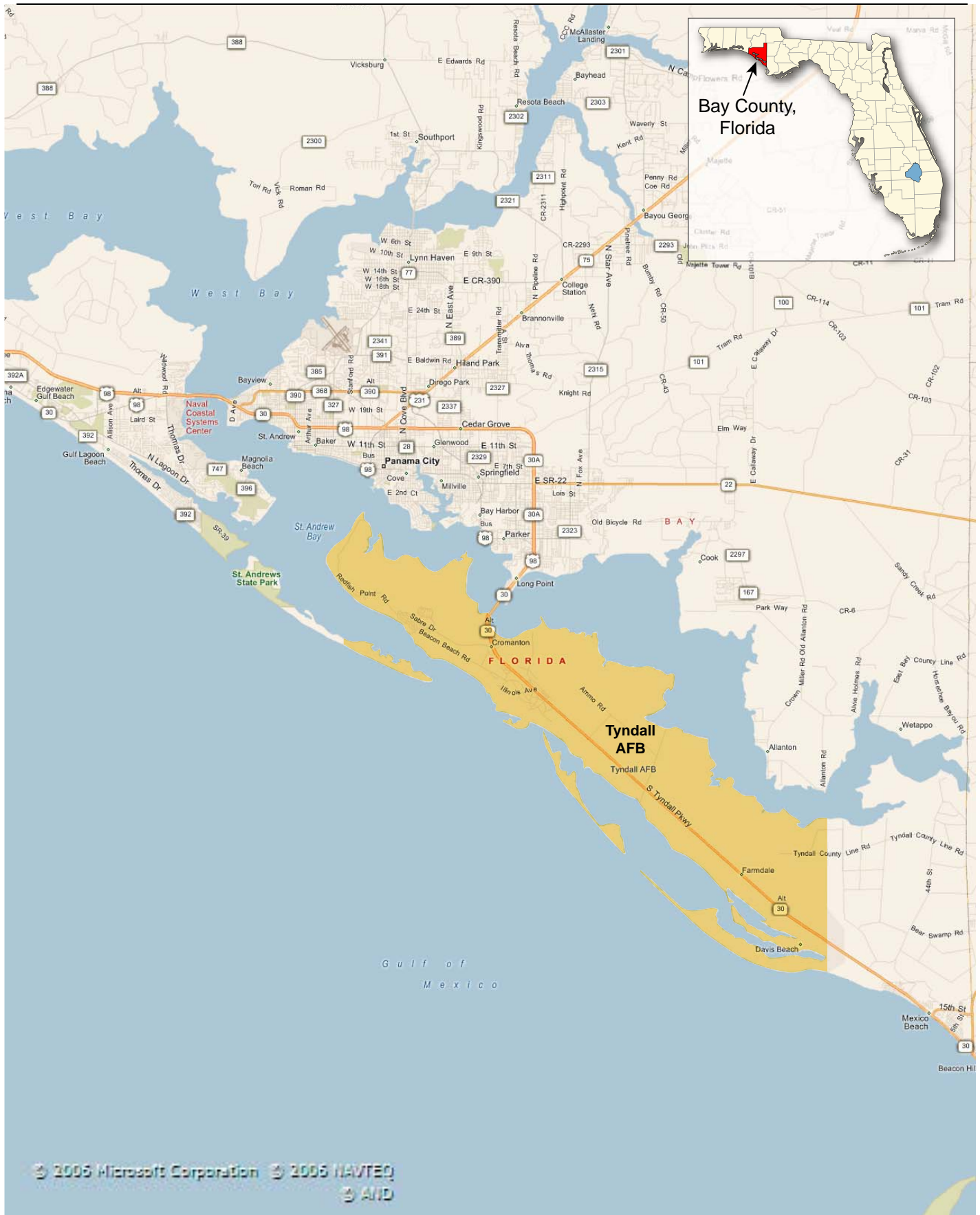
1.4 Applicable Regulatory Requirements

This EA has been conducted in accordance with the following regulations:

- Title 40, CFR, Parts 1500-1508
- Title 42, U.S. Code, Sections 4321-4370f
- Title 32 CFR Part 989, *Environmental Impact Analysis Process*
- Executive Order (EO) 11988, *Floodplain Management*, May 24, 1977
- EO 11990, *Protection of Wetlands*, May 24, 1977
- EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, February 11, 1994
- DoD Instruction 4715.9, *Environmental Planning and Analysis*
- Air Force Instruction (AFI) 32-7061, *The Environmental Impact Analysis Process*
- AFI 32-7064, *Integrated Natural Resources Management*
- AFI 32-7065, *Cultural Resources Management Program*

These regulations require the Air Force to analyze the potential environmental impacts of the Proposed Action and alternatives and to use these analyses in making decisions on a Proposed Action. Cumulative effects of other past, present, and reasonably foreseeable activities also must be assessed in combination with the Proposed Action. An EA is required to accomplish the following objectives:

- Briefly provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).
- Aid in an agency's compliance with NEPA when an EIS is not necessary and facilitate preparation of an EIS when necessary.



Source: Microsoft Mappoint

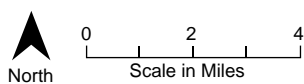


FIGURE 1-1
Vicinity Map
EA for Alternate Drone Launch System at Tyndall AFB



Source: Tyndall AFB INRMP

- Runway
- Road
- Highway
- Lake
- Tyndall AFB Boundary
- County Boundary

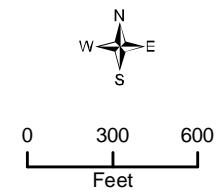
0 0.5 1 2 3 Miles



FIGURE 1-2

Base Map

EA for Alternate Drone Launch System at Tyndall AFB



\\CLEARWATER\GIS\PROJ\BAY COUNTY\334494_01_04_92_01_TYNDALFB_TO317_WETLANDDELINEATION\MAPFILES\MXD\MAPBOOK_TRUECOLOR_SOUTH_8X11.MXD TC_SOUTH_8X11.PDF 11/13/2007 10:19:02

Source: Florida Department of Transportation

FIGURE 1-3
 Location of Proposed Action
EA for Alternate Drone Launch System at Tyndall AFB

AFI 32-7061 directs Air Force officials to follow 32 CFR 989 which specifies the procedural requirements for the implementation of NEPA and requires consideration of environmental consequences as part of the planning and decision-making process. 32 CFR 989.14(g) requires preparation of a Finding of No Practicable Alternative (FONPA), which must be submitted to the Major Command Environmental Planning Function when the alternative selected is located in jurisdictional wetlands/surface waters or floodplains.

Regulations relevant to the resources assessed in this EA include, but are not limited to, the following:

- Noise Control Act
- Clean Air Act (CAA)
- Clean Water Act (CWA)
- Rivers and Harbors Act
- National Historic Preservation Act (NHPA)
- Archaeological Resources Protection Act (ARPA)
- Endangered Species Act (ESA)
- Coastal Zone Management Act (CZMA)
- Resource Conservation and Recovery Act (RCRA)
- EO 13175, *Consultation and Coordination With Indian Tribal Governments*, November 6, 2000

1.5 Consultation Requirements

1.5.1 Coastal Zone Management Consistency

The federal CZMA provides assistance to states, in cooperation with federal and local agencies, for developing land and water use programs in coastal zones. According to Section 307 of the CZMA, federal projects that affect land uses, water uses, or coastal resources in a state's coastal zone must be consistent, to the maximum extent practicable, with the enforceable policies of that state's federally approved coastal zone management plan.

The Florida Coastal Management Program (FCMP) is based on a network of agencies implementing 23 statutes that protect and enhance Florida's natural, cultural, and economic coastal resources. The Florida Department of Environmental Protection (FDEP) implements the FCMP through the Florida State Clearinghouse. The Clearinghouse routes applications for federal activities, such as EAs, to the appropriate state, regional, and local reviewers to determine federal consistency with the FCMP. Applicants are required to submit their own preliminary consistency determination along with the EA to the Clearinghouse. Following their review of the EA, the FCMP state agencies provide comments and recommendations to the Clearinghouse based on their statutory authorities. Based on an evaluation of the comments and recommendations, FDEP makes the state's final consistency determination, which will either agree or disagree with the applicant's own consistency determination.

Comments and recommendations regarding federal consistency are then forwarded to the applicant in the state clearance letter issued by the Clearinghouse.

Copies of the draft EA along with Tyndall AFB's own FCMP consistency determination, which is provided as Appendix A, were sent to the Florida State Clearinghouse to obtain the state's FCMP consistency determination for the Proposed Action. After the coordinated review of the EA was completed, the state issued the following statement: "Based on the information contained in the Draft EA and comments provided by our reviewing agencies, the state has determined that, at this stage, the proposed federal activities are consistent with the FCMP" (Appendix B). The state also stated that the subject project may require an Environmental Resource Permit (ERP) from the Northwest Florida Water Management District (NFWFMD). Based on findings of this EA, an ERP is not expected to be required for the Proposed Action. NFWFMD reviewed the EA through the Clearinghouse review and issued a finding of "No Comment" for the Proposed Action (see Appendix B). Tyndall AFB will ascertain whether or not an ERP is required for the Proposed Action during the design phase of the project.

1.5.2 Regulatory Agency Consultation

To satisfy the NEPA requirements regarding federal regulatory agency consultation for the EA, correspondence letters and copies of the draft EA were sent to the U.S. Fish & Wildlife Service (USFWS) and National Marine Fisheries Service ([NMFS] see Appendix B). Consultation with pertinent state agencies, including the Florida Fish & Wildlife Conservation Commission (FFWCC) and State Historic Preservation Officer (SHPO), occurred through the Florida State Clearinghouse.

In a response stamp dated 20 February 2008, USFWS issued the following finding for the Proposed Action: "The proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). This finding fulfills the requirements of the Act" (see Appendix B).

In a letter dated 26 March 2008, NMFS stated the following: "Based on the information in the EA, the NMFS agrees with your findings that the proposed action will not have a significant impact either by itself or considering cumulative impacts (see Appendix B)."

Through the Florida State Clearinghouse, no comments were received from FFWCC and SHPO issued a finding of "No Comment/Consistent" for the Proposed Action (see Appendix B). In a reply letter dated 17 March 2008, SHPO also stated that it found Brockington and Associates' Phase I archaeological survey report for the Proposed Action site "complete and sufficient in accordance with Chapter IA-46, Florida Administrative Code (see Appendix B). Consultation with SHPO on the Proposed Action is discussed further in Section 4.9.1.

1.5.3 Native American Tribal Consultation

To satisfy the NEPA requirements regarding Native American tribal consultation for the EA, correspondence letters and copies of the draft EA were sent to the Native American tribes that have expressed an interest in Tyndall AFB for their ancestral ties (see Appendix B). The Miccosukee Tribe of Indians of Florida submitted the following comment: "The Tribe determined that there is no cultural, historical, or religious site of the Tribe at this

location” (see Appendix B). No other comments were received from the tribes on the Proposed Action.

1.6 Public Involvement

A 31-day public review period was held 17 February 2008 – 18 March 2008 to solicit public comments on the draft EA. The public review period was announced in a public notice that was published in the *Panama City News Herald* of Panama City, Florida (see Appendix C). Copies of the draft EA were made available for public review during the review period at the Bay County Public Library and the Tyndall AFB Public Affairs Office. No public comments were received during the public review period.

1.7 Scope of the Environmental Assessment

This EA assesses the potential environmental impacts associated with the Proposed Action of constructing and operating an alternate drone launch system at Tyndall AFB, as well as those associated with the No Action Alternative of maintaining existing conditions. Under the No Action Alternative, the proposed drone launch system would not be constructed at Tyndall AFB.

1.8 Organization of the EA

Table 1-1 presents the organization of the EA.

TABLE 1-1
EA ORGANIZATION
EA for Alternate Drone Launch System at Tyndall AFB

Section	Title	Description
	<i>Acronyms and Abbreviations</i>	<i>Identifies the acronyms and abbreviations used in the EA</i>
1	<i>Purpose of and Need for the Proposed Action</i>	<i>Provides an introduction to the EA; identifies the need for and the purpose and objectives of the Proposed Action; describes the location of the Proposed Action; discusses the scope and organization of, and the regulatory, consultation, and public involvement requirements for, the EA</i>
2	<i>Description of the Proposed Action And Alternatives</i>	<i>Describes the alternatives development and selection processes; Proposed Action; and No Action Alternative</i>
3	<i>Affected Environment</i>	<i>Describes the existing conditions of each resource for which the Proposed Action and No Alternative are assessed</i>
4	<i>Environmental Consequences</i>	<i>Discusses the potential effects of implementing the Proposed Action and No Action Alternative on the resources described in Section 3</i>
5	<i>List of Preparers</i>	<i>Provides information on the persons who prepared the EA</i>
6	<i>List of Persons and Agencies Consulted</i>	<i>Presents a list of persons and agencies consulted during preparation of the EA</i>
7	<i>References</i>	<i>Presents bibliographical information about the sources used to prepare the EA</i>
<u>Appendix</u>		
A	<i>Tyndall AFB's FCMP Consistency Determination</i>	<i>Presents Tyndall AFB's own FCMP consistency determination for the Proposed Action</i>
B	<i>Regulatory Agency and Native American Tribal Correspondence</i>	<i>Presents documentation of correspondence with regulatory agencies and Native American Tribes</i>
C	<i>Public Involvement</i>	<i>Presents documentation of public review of the EA</i>

SECTION 2

Description of the Proposed Action and Alternatives

2.1 Alternatives Development

NEPA and 32 CFR Part 989 require consideration of reasonable alternatives to the Proposed Action. Only alternatives that would reasonably meet the defined need for the Proposed Action require detailed analysis in this EA.

Several design alternatives were evaluated during the development of the proposed alternate drone launch system. A steam rocket driven sled on a rail track system was selected as the preferred design based on numerous criteria. The other designs options that were evaluated were rejected based on their technical complexity and/or unproven launch capabilities. Modifying the existing drone launch system at Tyndall AFB was rejected as an alternative to constructing a new system during the planning phase of the Proposed Action. It is not possible to re-engineer the existing system to meet the design and operational requirements of the proposed system. Moreover, the 53 WEG plans to retain and use the existing system as a back up to the proposed system.

A siting analysis was conducted during the planning phase of the Proposed Action to evaluate potential construction sites for the proposed alternate drone launch system. The siting analysis was based on the following screening criteria:

- Operational requirements
- Accessibility and utility connections
- Size sufficiency
- Environmental impacts

Using these screening criteria, the 53 WEG in collaboration with the 325 Civil Engineer evaluated the potential suitability of several construction sites for the alternate drone launch system. Based on the operational, accessibility, and utility connection requirements of the proposed system, only sites within the immediate vicinity of the drone launch facility were evaluated during the siting analysis. The available area within the fenced boundary of the drone launch facility was determined to not meet the space requirements of the proposed system and, therefore, was rejected as a suitable construction site. Areas immediately north, northeast, and northwest of the facility were also rejected because they would hinder visibility of the launch operation from the existing block house (Building 8525), which is an operational requirement of the proposed system. The immediate areas west and southwest of the drone launch facility are densely forested with much of the area to the southwest being forested wetland. Although sufficient upland habitat exists immediately west of the facility for constructing the system, a significant number of trees within the forested wetland to the southwest would have to be removed to provide an unobstructed launch path for the system. The immediate area south of the facility is mostly wetland habitat and,

therefore, was rejected as being environmentally unsuitable for constructing the system. Based on the screening criteria used, the only suitable site to construct the proposed drone launch system is the area just east of the drone launch facility (see Figure 1-3). This site provides sufficient visibility of the launch operation from the block house and would not result in wetland impacts.

For the reasons presented above, it was determined that there are no reasonable alternatives to constructing the proposed drone launch system at the proposed construction site. Because potential design and construction site alternatives were rigorously evaluated and rejected during system development and project siting, they do not require reexamination in this EA. Therefore, only the Proposed Action and the No Action Alternative are evaluated in this EA.

2.2 Alternatives Considered but Eliminated from Further Study

As discussed in Section 2.1, there are no alternatives that reasonably meet the defined need of the Proposed Action. Design and construction site alternatives were rigorously evaluated during system development and project siting. Design options considered during system development were eliminated based on their complexity and/or unproven launch capabilities. Modification of the existing system was also considered but rejected as a reasonable alternative to constructing a new system.

With respect to construction location, there was very little siting flexibility for the proposed system based on the screening criteria used. The operational and space requirements of the system, as well as environmental constraints resulted in the elimination of all site options considered.

2.3 No Action Alternative

The No Action Alternative is to maintain existing conditions. Under the No Action Alternative, the proposed alternate drone launch system would not be constructed.

2.4 Description of the Proposed Action

The Proposed Action involves the construction and operation of an alternate drone launch system adjacent to the eastern side of the drone launch facility at Tyndall AFB (see Figure 1-3). The proposed system would be used by the 53 WEG to launch BQM-167A subscale aerial target drones to support the AFSAT program. The BQM-167A subscale aerial target drone is used by the Air Force to test and develop various types of weapons systems. The proposed alternate drone launch system would alleviate the operational problems and reduce the high costs associated with the existing system, which would be retained and used as a back up to the proposed system.

The BQM-167A drone is 125.8 inches wide wingtip to wingtip, 236.6 inches long nose to tail, and 52.3 inches high bottom of engine to top of vertical stabilizer. Its launch weight ranges between approximately 1,700 and 2,000 pounds depending on payload and fuel load. The general design of the proposed alternate drone launch system is shown on Figure 2-1. With the proposed system, the drone would be attached to a stainless steel sled that travels on a stainless steel rail track. The sled would be powered by steam rocket propulsion on the track. The steam would be generated by electrically heated distilled water. The sleds and rockets would both be reusable. The drone would be carried by the sled from its starting point on the track to the end of the track which would be curved upward to provide an upward launch trajectory. By the time the drone reaches the end of the track where it detaches from the sled and is launched, it would be traveling at a velocity sufficient enough for its propulsion system to sustain flight. The proposed system would use multiple sleds to allow for quick-turnaround sequential drone launches. As under the current program, at the end of the launch mission, the drone would either return to the existing drone recovery area at the Base to parachute for recovery, or it would parachute over water for an aquatic recovery by the Drone Water Recovery Workcenter. Over a typical 200-flight mission schedule, approximately 40 recoveries are over water, and 160 recoveries are over land. The recovered drone is returned to Building 256 at the drone launch facility for post-flight repairs and refurbishment.

As shown on Figure 2-1, the clear area footprint of the proposed alternate drone launch system would measure approximately 800 feet (ft) x 200 ft (3.7 acres). Vegetation within this area would be maintained below a height of 2 ft. The configuration of the clear area footprint and rail track at the proposed site is shown on Figure 2-2. The rail track of the proposed system would be T-shaped with the long segment measuring approximately 600 ft in length and the short segment measuring approximately 100 ft in length (see Figure 2-1). The rail track would be supported by approximately 40 concrete blocks spaced at approximately 20 ft intervals. Each support block would measure approximately 6 ft in length, 3 ft in width, and 2 ft in height. Most of the rail track would be approximately 8 ft in height and the end of the track which would be curved upward would have a maximum height of approximately 30 ft.

The utilities required to support the proposed alternate drone launch system would be obtained from the drone launch facility. The proposed system would include a perimeter security fence. The existing unpaved road that parallels the western side of the construction site would provide access to the system. This road would not be paved or modified in any manner.

2.5 Identification of the Preferred Alternative

The preferred alternative for this EA is to implement the Proposed Action as described in Section 2.4.

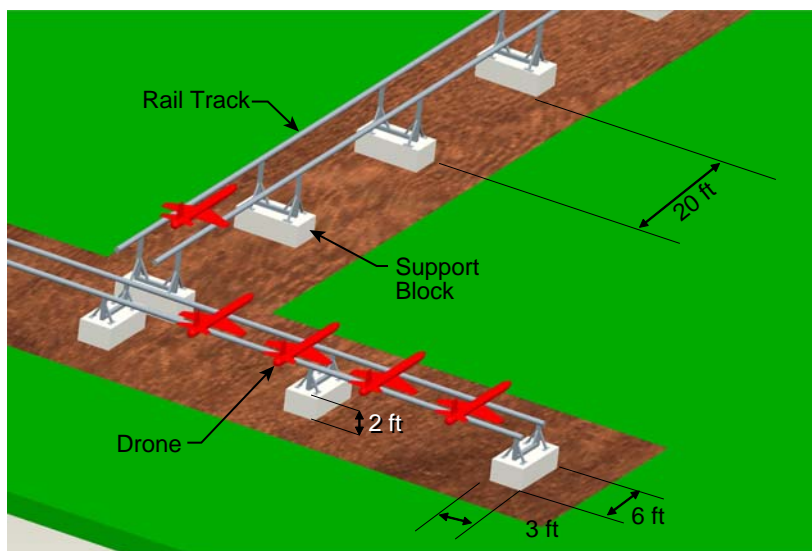
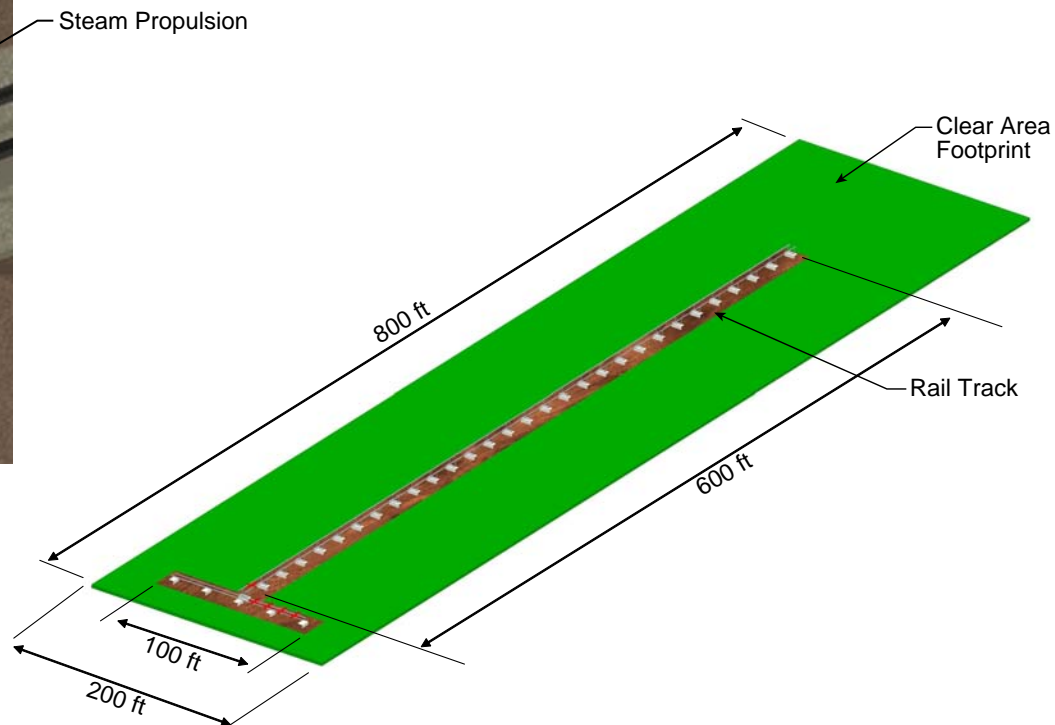
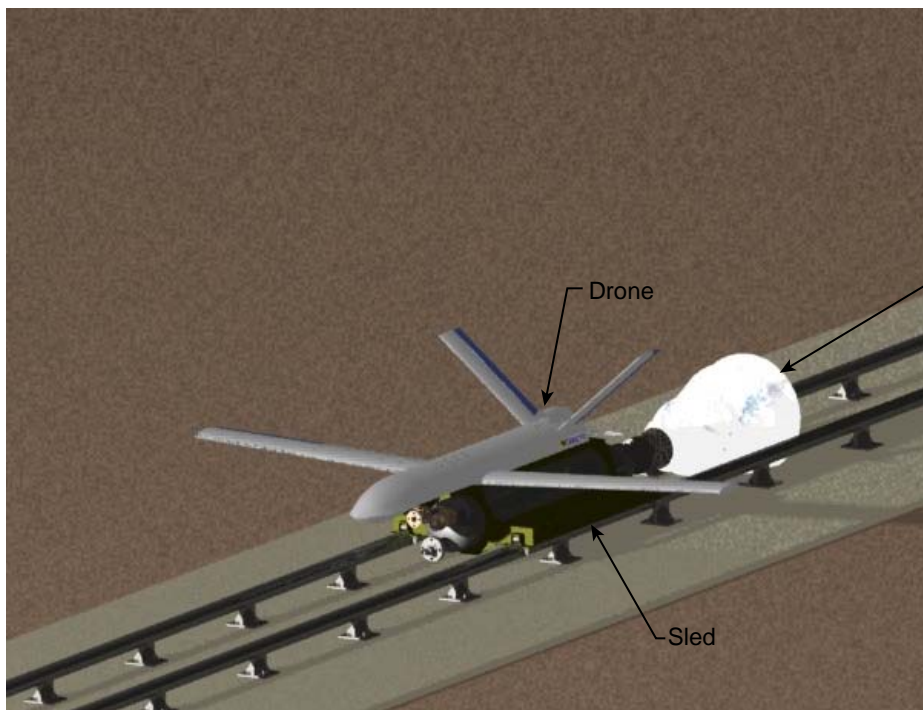
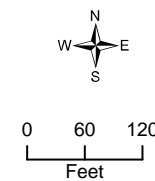


FIGURE 2-1
General Design of Alternate Drone Launch System
EA for Alternate Drone Launch System at Tyndall AFB



Source: Florida Department of Transportation

FIGURE 2-2
Configuration of Clear Area Footprint and Rail Track
EA for Alternate Drone Launch System at Tyndall AFB

2.6 Summary of Environmental Consequences

The potential environmental consequences of the Proposed Action and No Action Alternative are summarized in Table 2-1.

TABLE 2-1
SUMMARY OF ENVIRONMENTAL CONSEQUENCES
EA for Alternate Drone Launch System at Tyndall AFB

Resource	Proposed Action	No Action Alternative
Air Quality	<p>MINOR IMPACT</p> <p>Construction would result in short-term, minor impacts to air quality from fugitive dust and construction vehicle exhaust emissions. Fugitive dust would be controlled at the site using BMPs. Fugitive dust and exhaust emissions would not collectively represent a new major source of air emission, and, therefore, would not require a modification to Base air operation permit. Operation of the proposed system would not include any new source of air emission that would be regulated under the Base air operation permit. The sled that carries the drone on the track of the system would be powered by steam propulsion and, therefore, would not produce any air emissions. The proposed system would not increase the overall number of drone launches conducted by the 53 WEG and, therefore, would not result in an increase in drone air emissions.</p>	NO EFFECT
Noise	<p>MINOR IMPACT</p> <p>Construction would temporarily increase ambient noise levels at and around the construction site. The increased noise levels would be short term and limited to normal working hours. Based on the EPA estimates of noise dissipation, construction-related noise would be negligible or not audible in the nearest noise-sensitive areas. The proposed system would produce less noise during a drone launch than the currently used system. The proposed system would be operated intermittently and during normal working hours. The noise generated would be of relatively short duration and is expected to be negligible or not audible in the nearest noise-sensitive areas.</p>	NO EFFECT
Geology, Topography, and Soils	<p>MINOR IMPACT.</p> <p>Construction would not involve any intrusive construction activity that would impact subsurface geological formations. Significant land contouring would not be required. Construction would have minor impacts on soils during site clearing and grading. Sediment and erosion controls would be implemented during construction to prevent any indirect impacts to surrounding soils. Operation of the proposed system would not involve any activity that would affect geology, topography, or soils in any manner.</p>	NO EFFECT

TABLE 2-1
SUMMARY OF ENVIRONMENTAL CONSEQUENCES
EA for Alternate Drone Launch System at Tyndall AFB

Resource	Proposed Action	No Action Alternative
Groundwater	<p>MINOR IMPACT</p> <p>Construction may have a negligible, temporary impact on the surficial groundwater table. Little or no dewatering is expected to be required to construct the system. The existing water well at the drone launch facility would not be affected in any manner by construction. Operation of the proposed system would not involve withdrawals from, or discharges to, groundwater. The existing water well at the drone launch facility would not be affected in any manner by operation of the system.</p>	NO EFFECT
Surface Water	<p>NO EFFECT</p> <p>Construction would not directly impact surface waters because none are located at or in the immediate vicinity of the proposed construction site. Sediment and erosion controls would be implemented during construction to prevent any indirect impacts to surface waters. No hazardous materials would be stored at the site or used to operate the system; therefore, its operation would have no potential to directly or indirectly affect surface water quality.</p>	NO EFFECT
Floodplains	<p>NO EFFECT</p> <p>The site of the proposed system is not located within the 100-year floodplain. Construction or operation of the system would not involve any activity that would affect nearby floodplain areas in any manner.</p>	NO EFFECT
Wetlands	<p>NO EFFECT</p> <p>There are no jurisdictional wetlands at or within the immediate vicinity of the site of the proposed system. Sediment and erosion controls would be implemented during construction to prevent any indirect impacts to wetlands. Operation of the system would not involve any activity that would affect wetlands in any manner.</p>	NO EFFECT
Vegetation	<p>MINOR IMPACT</p> <p>Construction of the rail track of the proposed system would displace approximately 0.02 acre of vegetation. Trees and shrubs within the clear area footprint of the proposed system, which is approximately 3.7 acres in size, would be cut and the vegetation within this area would be maintained below a height of 2 ft. Upland pine forest is very abundant at Tyndall AFB and is not considered an ecologically sensitive vegetative community. The planted pine portion of the site is considered a disturbed vegetative community. As such, the proposed impacts to these types of vegetation would be minor. Sediment and erosion controls would be implemented during construction to prevent any indirect impacts to surrounding vegetation. Operation of the proposed system would not involve any activity that would affect vegetation in any manner.</p>	NO EFFECT
Fish and Wildlife	<p>MINOR IMPACT</p> <p>Construction of the rail track of the proposed alternate drone</p>	NO EFFECT

TABLE 2-1
SUMMARY OF ENVIRONMENTAL CONSEQUENCES
EA for Alternate Drone Launch System at Tyndall AFB

Resource	Proposed Action	No Action Alternative
	launch system would displace approximately 0.02 acre of upland pine habitat. Trees and shrubs within the clear area footprint of the proposed system, which is approximately 3.7 acres in size, would be cut and the vegetation within this area would be maintained below a height of 2 ft. Because the site is located adjacent to industrial land use and because the type of habitat at the site is very abundant at Tyndall AFB, the proposed impact to the habitat that the site provides would be minor. Wildlife within the vicinity of the site may be temporarily disturbed by construction noise during the construction period; however the overall impact is expected to be minor. The noise that would be generated during operation of the proposed system has the potential to disturb wildlife within the vicinity of the site; however, the overall impact to wildlife is expected to be minor because the noise would be intermittent, of short duration, and at lower levels than the noise generated during operation of the current system. The proposed system would not use RATO bottles; therefore, its operation would eliminate the impacts that spent RATO bottles have on surrounding habitats.	
Listed Species	<p>MINOR IMPACT</p> <p>The site of the proposed system is not expected to contain any listed plant species or be utilized by any listed animal species based on its habitat type and location. The overall impact that construction and operational noise would have on listed animal species that utilize the wet prairie southwest of the site and the salt marshes south of the site, such as listed wading bird species, is expected to be minor. Construction noise would be limited to the construction period and operational noise would be intermittent, of short duration, and at lower levels than the noise generated during operation of the current system. The proposed system would not use RATO bottles; therefore, its operation would eliminate the impacts that spent RATO bottles have on surrounding habitats.</p>	NO EFFECT
Land Use	<p>NO EFFECT</p> <p>The land use classification of the site of the proposed system (Industrial) would not be changed.</p>	NO EFFECT
Transportation	<p>MINOR IMPACT</p> <p>The Proposed Action does not involve the construction of new roads or modification of existing roads. The proposed system would be operated by the personnel who operate the existing system. No personnel hires or relocations would occur under the Proposed Action. As such, the Proposed Action would not permanently increase traffic in the area. Construction would temporarily increase traffic in the area; however, the projected increase is not expected to have a major burden on the road system in or around the area. After the system is constructed, traffic levels in the area would return to current levels.</p>	NO EFFECT

TABLE 2-1
SUMMARY OF ENVIRONMENTAL CONSEQUENCES
EA for Alternate Drone Launch System at Tyndall AFB

Resource	Proposed Action	No Action Alternative
Environmental Compliance	<p>MINOR IMPACT</p> <p>Construction and operation of the proposed system would be conducted in coordination with 325 CES/CEV and in accordance with all applicable Tyndall AFB environmental management plans. Operation of the system would not include any new source of air emission that would be regulated under the Base air operation permit. No hazardous materials would be stored at the site or used to operate the system; therefore, its operation would have no potential to directly or indirectly affect surface water quality. Sediment and erosion controls would be implemented during construction to prevent any indirect impacts to surface waters. There are no POL-contaminated sites or IRP sites at or within the vicinity of the site of the proposed system.</p>	NO EFFECT
Cultural Resources	<p>MINOR IMPACT</p> <p>There are no historic structures at or in the vicinity (within one mile) of the site of the proposed system. Brockington and Associates, Inc. identified one previously unknown archaeological site within the project area during a Phase 1 archaeological survey conducted in December 2007 for this EA. No archaeological sites have been previously identified within or in the vicinity (within one mile) of the project area in the past. Brockington and Associates determined that the archaeological site is the remains of an early twentieth century homestead and that its limits extend beyond the boundaries of the clear area footprint of the proposed system. Based on the survey findings, Brockington and Associates concluded that the portion of the archaeological site located within the clear area footprint does not meet the criteria for NRHP eligibility and that no further work is required for this portion of the site. Brockington and Associates recommends that at a future date, Tyndall AFB completely delimit the site boundaries and render an assessment of NRHP eligibility for the undocumented portion of the site. The survey report has been submitted to SHPO for review. <i>Correspondence with SHPO and Native American Tribes on the Proposed Action will be discussed here in the final EA.</i> SOPs 5 and 6 of the Tyndall AFB ICRMP would be implemented in the event that cultural resources are discovered during construction of the proposed system.</p>	NO EFFECT
Socioeconomics	<p>MINOR POSITIVE IMPACT</p> <p>The proposed system would be operated by the personnel who operate the existing system. No personnel hires or relocations would occur under the Proposed Action. Therefore, the Proposed Action would not affect the demographics of the area. Expenditures for construction-related materials and supplies would have a small, short-term, beneficial effect on the economy of the region.</p>	NO EFFECT

TABLE 2-1
SUMMARY OF ENVIRONMENTAL CONSEQUENCES
EA for Alternate Drone Launch System at Tyndall AFB

Resource	Proposed Action	No Action Alternative
Environmental Justice	NO EFFECT Construction and operation of the proposed system would not result in adverse impacts associated with air quality, noise, groundwater, surface water, or hazardous materials and wastes. As a result, minorities and low-income residents living in proximity to the Proposed Action would not be disproportionately impacted.	NO EFFECT

Existing Conditions

3.1 Air Quality

The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) pursuant to Sections 109 and 301(a) of the CAA. These standards, expressed in micrograms per cubic meter, establish safe concentration levels for each “criteria” pollutant. NAAQS have been set for six criteria pollutants: carbon monoxide (CO); nitrogen dioxide (NO₂); ozone (O₃); sulfur oxides (SO_x), measured as sulfur dioxide (SO₂); lead (Pb); and two types of particulate matter: particulate matter less than or equal to 10 microns in aerodynamic diameter (PM₁₀) and particulate matter less than or equal to 2.5 microns in aerodynamic diameter (PM_{2.5}).

The CAA divides the United States into attainment and nonattainment areas, usually by county or Metropolitan Statistical Area (MSA). Areas not meeting NAAQS are designated nonattainment for the specific pollutant. Bay County and, therefore, Tyndall AFB, is currently designated as an attainment area (meets the EPA air quality standards for all criteria pollutants [60 Federal Register 62748, December 7, 1995]). Tyndall AFB operates under a minor air operation permit issued by the State of Florida in September 2005. The following five sources of air emissions at Tyndall AFB are regulated under this permit: paint booths (seven separate units), fuel fill stands (aircraft refueler truck fill), jet engine testing (hush houses and engine shop), bulk fuel storage tanks (6000 and 400 Areas), and boilers (all units \geq 1.0 million British thermal units per hour [mmBTU/hr]).

3.2 Noise

Airfield operations are the primary sources of noise at Tyndall AFB. Other noise sources include vehicular traffic, training activities, and intermittent construction. The Tyndall AFB Air Installation Compatible Use Zone (AICUZ) program provides noise contours for airfield operations at the Base. The noise contours for Tyndall AFB are presented in decibels on the A-weighted scale (dBA) as Day-Night Average A-Weighted Sound Level (DNL). The DNL metric accounts for the greater annoyance of noise during nighttime hours, and is calculated by averaging hourly sound levels for a 24-hour period and adding a weighting factor to the nighttime values. The noise guidelines established for land use planning at Tyndall AFB are essentially the same as those published by the Federal Interagency Committee on Urban Noise in the June 1980 publication, *Guidelines for Considering Noise in Land-Use Planning and Control*. Based on these guidelines, the maximum acceptable noise level for most residential land uses is considered to be 65 DNL.

Expected noise levels during typical construction activities can be estimated using a number of reports prepared by EPA on general noise conditions in the United States. A summary report, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* (EPA, 1974), indicated that national noise level trends could be used to represent regional noise conditions on a broad basis. Individual discrepancies may occur, especially in areas with a high concentration of specialized land

uses such as heavy industrial or government/institutional, but the noise levels generally are consistent within a specific land use area across the country.

Based on data presented in the EPA publication, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* (EPA, 1971), outdoor construction noise levels range from 78 dBA to 89 dBA, approximately 50 ft from a typical construction site. Table 3-1 presents typical noise levels (dBA at 50 ft) estimated by EPA for the main phases of outdoor construction.

TABLE 3-1
TYPICAL NOISE LEVELS FOR OUTDOOR CONSTRUCTION
EA for Alternate Drone Launch System at Tyndall AFB

Construction Phase	Noise Level (dBA at 50 feet from source)
Ground Clearing	84
Excavation, Grading	89
Foundations	78
Structural	85
Finishing	89

dBA – decibel on the A-weighted scale

The primary noise-sensitive areas at Tyndall AFB are the accompanied military housing neighborhoods of Felix Lake, Wood Manor, Redfish Point, Bay View, and Shoal Point. All of these areas are located several miles northwest of the site of the proposed alternate drone launch system. The nearest noise-sensitive areas outside of Tyndall AFB are the residential communities within the City of Allanton located approximately 3 miles northeast of the site.

3.3 Geology, Topography, and Soils

Unconsolidated sands and clayey sands deposited since the Pliocene age extend down to approximately 110 ft below land surface (bls) at Tyndall AFB. This material is relatively permeable and overlays the Intracoastal Formation which extends down to approximately 330 ft bls. The Intracoastal Formation is primarily composed of fossils, quartz sand, and calcium carbonate grains cemented by crystalline calcite and clay. The upper portion of this formation is relatively impermeable, while the lower portion is highly permeable. The Intracoastal Formation overlays highly permeable limestone that extends below 600 ft bls in some areas.

Tyndall AFB is located within the East Gulf Coastal Plain physiographic province. In general, the topography of Tyndall AFB is relatively flat, with elevations ranging from sea level along the coastline to approximately 30 ft above mean sea level (msl) along a ridge that generally follows U.S. Highway 98. Elevations at the site of the proposed alternate drone launch system range from approximately 18 to 21 ft msl.

In general, the soils of Tyndall AFB are sandy and acidic. General soil associations and detailed soil types at Tyndall AFB have been identified by the Natural Resources Conservation Service (NRCS) Soil Survey for Bay County, Florida (U.S. Department of Agriculture [USDA], 1984). Based on the NRCS generalized soil map prepared for Bay County, the site of the proposed alternate drone launch system is located within the part of Tyndall AFB that is mapped as the Pottsburg-Leon-Rutlege soil association. Soils within this association are nearly level, poorly drained or very poorly drained, and sandy to a depth of 80 inches or more.

3.4 Water Resources

3.4.1 Groundwater

The shallowest source of groundwater is the surficial aquifer, which is the uppermost hydrostratigraphic unit. At Tyndall AFB, the surficial aquifer is comprised of unconsolidated, poorly indurated, siliciclastic deposits and ranges in thickness from approximately 50 to 100 ft bls. Depths to groundwater at the Base range from just below land surface to 15 ft bls. The surficial aquifer is nonartesian and is not used as a source of potable water at the Base. Recharge of this aquifer is primarily through precipitation.

The Intermediate Confining Unit is a low permeability layer that separates the surficial aquifer from the deeper Floridan Aquifer. This confining unit consists primarily of fine-grained siliciclastic deposits interlain with carbonate strata. At Tyndall AFB, the Intermediate Confining Unit ranges in thickness from approximately 200 to 250 ft.

The Floridan Aquifer consists primarily of limestone and dolomite and is approximately 1,100 ft in thickness. The upper portions of the Floridan Aquifer provide potable water for most of the Florida Panhandle. Some of the potable water used by Tyndall AFB is pumped from the Floridan Aquifer by permitted wells. Water from these wells is filtered and chlorinated prior to use. Most of the potable that used by the Base is supplied by Bay County Utilities, which uses Deer Point Lake as its main source.

One water well exists at the drone launch facility. This well is used as a source of both potable water and fire suppression water for the facility. Different pumping systems are utilized for each source. In the future, potable water for the facility is planned to be obtained from the county water transmission line off of U.S. Highway 98 instead of from this well. The well is planned to be retained as a source of fire suppression water for the facility.

3.4.2 Surface Water

Tyndall AFB is located within the Choctawhatchee River Basin which drains the Choctawhatchee River southward into Choctawhatchee Bay, and eventually into the Gulf of Mexico. The surface water bodies that surround the Tyndall AFB peninsula are St. Andrews Bay, East Bay, St Andrews Sound, and the Gulf of Mexico. These systems are hydrologically connected to Choctawhatchee Bay to the west. There are no surface waters at or in the immediate vicinity of the site of the proposed alternate drone launch system. The nearest surface water to the site is St. Andrews Sound, located approximately 800 ft to the south (see Figures 1-2 and 1-3).

In general, storm water at Tyndall AFB drains northward in areas north of U.S. Highway 98 and southward in areas south of U.S Highway 98. The Base storm water system consists

primarily of drainage ditches in undeveloped areas and underground piping in developed areas. The site of the proposed alternate drone launch system is undeveloped and mostly upland pine forest. Therefore, most of the storm water that falls on the site percolates into the site soils. Shallow upland-cut swales exist on both sides of the unpaved road that parallels the western side of site (Figure 3-1). These swales have top-of-bank widths of approximately 5 ft, channel widths of approximately 2 ft, and moderately steep embankments that are approximately 3 ft in height. These swales convey storm water southward into the wetland areas located near St. Andrews Sound. The portions of these swales within the site do not have hydric soils, contain little to no hydric vegetation, and did not contain any water during the field investigation conducted for this EA. Upland-cut ditches also exist on both sides of the unpaved trail located in the southern part of the site. These ditches have top-of-bank widths of approximately 10 ft, channel widths of approximately 4 ft, and steep embankments that are approximately 8 ft in height. These ditches convey storm water southward into the wetland areas located near St. Andrews Sound. The portions of these ditches within the site do not have hydric soils, contain no hydric vegetation, and did not contain any water during the field investigation conducted for this EA.

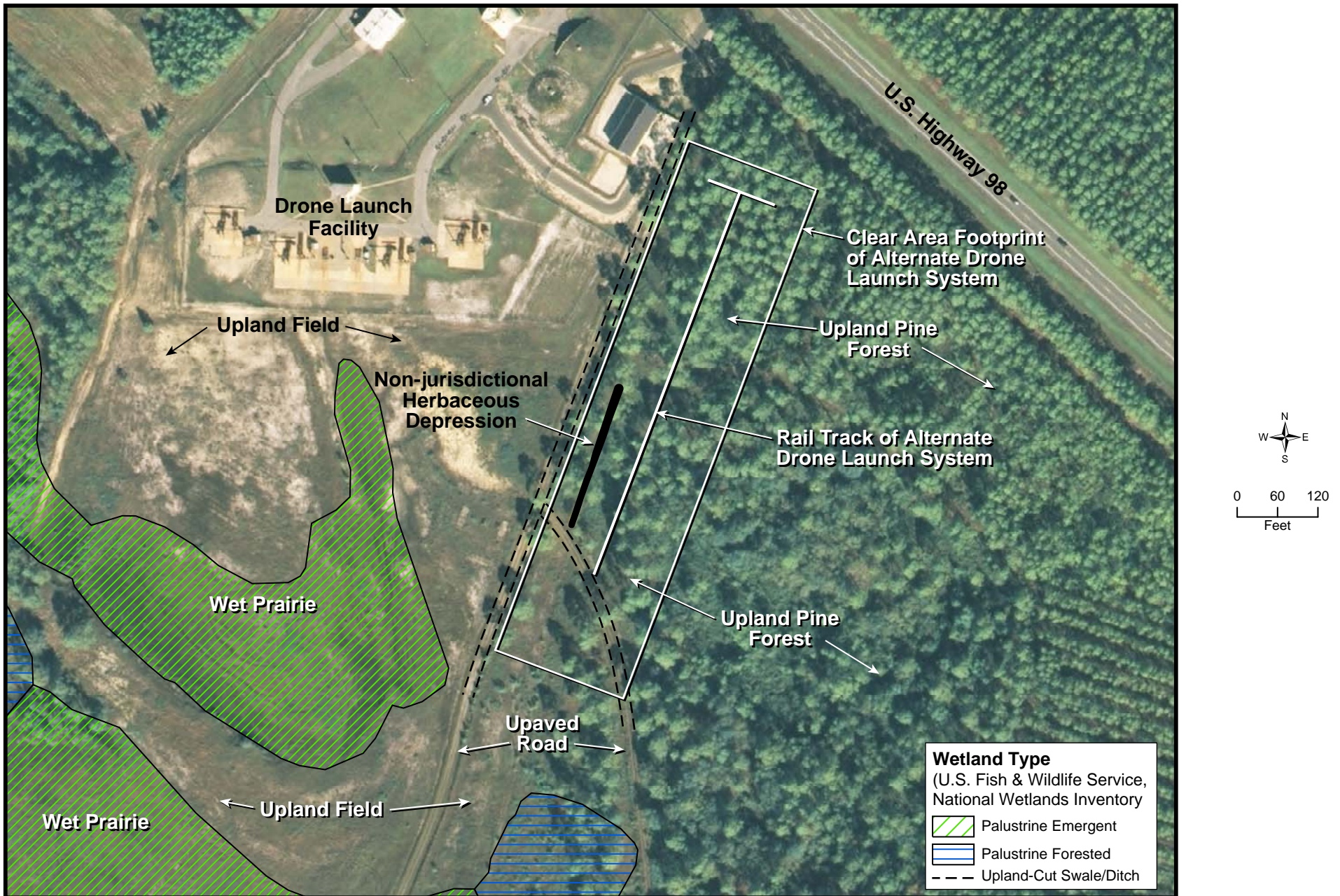
3.4.3 Floodplains

Portions of Tyndall AFB have been mapped as 100-year floodplain areas on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs). Much of the area mapped as 100-year floodplain exists along the coastline and is prone to flooding as a result of heavy tidal surges that occur during strong storms such as hurricanes. Many parts of the Base outside the mapped 100-year floodplain areas are also prone to tidal surge flooding. The site of the proposed alternate drone launch system is not located within the 100-year floodplain.

3.5 Biological Resources

3.5.1 Wetlands

Approximately 40 percent of Tyndall AFB is estimated to be wetland habitat. Wetlands on Tyndall AFB have been mapped and classified in accordance with the USFWS's National Wetlands Inventory (NWI) classification system as described in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et. al., 1979). Based on NWI mapping, the entire site of the proposed alternate drone launch system is upland habitat. During the field investigation conducted for this EA, a small, linear-shaped, herbaceous depression was identified at the site (see Figure 3-1). This depression is approximately 12 to 15' in width and 225 ft in length. Some portions of the depression contain hydric soils and vegetation and other portions do not. Hydric plant species within the depression primarily include yellow-eyed grass (*Xyris* sp.), meadow-beauty (*Rhexia* sp.) hat-pin (*Eriocaulon* sp.), and St. John's wort (*Hypericum* sp.). The southern end of the depression culminates near the upland-cut ditch that exists on the northern side of the unpaved trail located in the southern part of the site; however, there is no obvious hydrological connection between the depression and ditch. Based on field observations, the depression appears to be man-made, potentially excavated for fill material for the adjacent trail. Based on these as well as other applicable characteristics of the depression, it would not be considered a jurisdictional wetland according to state or federal wetland regulations.



Source: Florida Department of Transportation

FIGURE 3-1
Natural Features of Proposed Action Site
EA for Alternate Drone Launch System at Tyndall AFB

Six areas at Tyndall AFB have been identified by the Florida Natural Areas Inventory (FNAI) as Special Interest Natural Areas. These areas consist mostly of wetland habitat and are relatively pristine. They are considered ecologically valuable and support a variety of plants and wildlife species, some of which are rare or protected. The site of the proposed alternate drone launch system is located just northeast of the Drone Launch Wet Prairie Area, which is one of the six Special Interest Natural Areas (see Figure 3-1).

3.5.2 Vegetation

Much of the historical vegetation of the Tyndall AFB peninsula has been altered by past human activity. The native vegetation of the peninsula has been impacted primarily by past agricultural and silvicultural practices. Slash and sand pine plantations have replaced much of the native longleaf pine communities, as these species are considered more favorable for timber production. Although Tyndall AFB continues to maintain pine plantations for commercial harvest, its forestry management program focuses less on commercial harvesting and more on restoring historical vegetative conditions and natural processes through selective thinning, natural regeneration of native species, and prescribed fire.

The site of the proposed alternate drone launch system is mostly upland pine forest. The northernmost part of the site is planted slash pine (*Pinus elliottii*). In this part of the site, the vegetative cover is approximately 60 percent within the canopy, 10 percent within the subcanopy, and 50 percent within the herbaceous layer. The canopy and subcanopy are dominated by slash pine and the herbaceous layer is dominated by saw palmetto (*Serenoa repens*), gallberry (*Ilex glabra*), mucadine grape (*Vitis rotunifolia*), wiregrass (*Aristida* sp.), winged sumac (*Rhus copallina*), and greenbriar (*Smilax* sp.). Throughout most of the area south of the planted pine, the vegetative cover of the forest is approximately 20 percent within the canopy, 5 percent within the subcanopy, and 70 percent within the herbaceous layer. The canopy and subcanopy are dominated by slash pine and longleaf pine (*Pinus palustris*) and the herbaceous layer is dominated by the same species that dominate the planted pine. In general, the tree density of the site decreases in the southern direction. In the southernmost part of the site, the vegetative cover of the canopy is approximately 5 percent. Vegetation within the swales, ditches, and depression located at the site are discussed in Sections 3.4.2 and 3.5.1.

3.5.3 Fish and Wildlife

Tyndall AFB provides habitat for a wide variety of fish and wildlife species. Inventories of the Base's fish and wildlife species are based mainly on studies conducted by the Natural Resources office of the 325 Civil Engineering Squadron (325 CES/CEVN) and FNAI. Tyndall AFB has a freshwater fisheries management program and wildlife management programs for both game and non-game wildlife species.

The site of the proposed alternate drone launch system is mostly upland pine forest, with the northernmost part of the site being planted pine. The overall wildlife habitat quality of the site is considered to be moderate because of its proximity to the drone launch facility and U.S. Highway 98. Despite its proximity to industrial land use, the site and the adjacent forested habitat are expected to be utilized by several of the same wildlife species that utilize similar habitat at the Base. The salt marshes and wet prairie located south and southwest of the site provide relatively high quality habitat to a wide variety of wildlife species. Because the site of the proposed alternate drone launch system is located adjacent to the drone launch

facility, it is not open to recreational hunting or managed by the Base wildlife management program.

3.5.4 Listed Species

A total of 20 listed plant species and 27 listed animal species have been documented at Tyndall AFB or in its immediate vicinity. Table 3-2 presents the listed species and the habitat types they utilize. As presented in Table 3-2, the listed species include seven species of reptiles, 15 species of birds, one species of fish, and four species of mammals. A total of one plant species and 11 animal species are federally listed as Threatened or Endangered.

TABLE 3-2
LISTED PLANT AND ANIMAL SPECIES DOCUMENTED AT TYNDALL AFB OR IN ITS IMMEDIATE VICINITY
EA for Alternate Drone Launch System at Tyndall AFB

Common Name	Scientific Name	Federal Status (USFWS)	State Status (FFWCC or FDACS)	Habitat Type
PLANTS				
Apalachicola dragonhead	<i>Physostegia godfreyi</i>		T	Wet prairie
Bog tupelo	<i>Nyssa ursine</i>	ce		Wet prairie
Chapman's butterwort	<i>Pinguicula planifolia</i>	ce	T	Wet prairie
Chapman's crownbeard	<i>Verbesina chapmanii</i>		T	Wet prairie
Decumbent pitcher plant	<i>Sarracenia purpurea</i>		T	Wet prairie, bogs
Dew thread sundew	<i>Drosera filiformis</i>		E	Wet prairie
Drummond's yellow-eyed grass	<i>Xyris drummondii</i>	ce		Wet prairie, flatwoods
Giant water dropwort	<i>Oxypolis greenmanii</i>		E	Wet prairie, ditches
Godfrey's golden aster	<i>Chrysopsis godfreyi</i>	ce	E	Dunes
Gulf coast lupine	<i>Lupinus westianus</i>	ce	T	Scrub, dunes
Harper's yellow-eyed grass	<i>Xyris scabrifolia</i>		T	Wet prairie
Henry's spider lily	<i>Hymenocallis henryae</i>	ce	E	Cypress stringers
Karst pond yellow-eyed grass	<i>Xyris longisepala</i>		E	Upland lake margin
Large-leaved jointweed	<i>Polygonella macrophylla</i>	ce	T	Scrub
Parrot pitcher plant	<i>Sarracenia psittacina</i>		T	Wet prairie, bogs
Quillwort yellow-eyed grass	<i>Xyris isoetifolia</i>	ce	E	Wet prairie
Southern milkweed	<i>Asclepias viridula</i>	ce	T	Wet prairie
Southern red lily	<i>Lilium catesbaei</i>		T	Wet prairie
Spoon-leaved sundew	<i>Drosera intermedia</i>		T	Wet prairie
Thick-leaved water willow	<i>Justicia crassifolia</i>	ce	E	Wet prairie
Violet-flowered butterwort	<i>Pinguicula ionantha</i>	T	E	Cypress domes
White-flowered wild petunia	<i>Ruellia noctiflora</i>		E	Wet prairie
BIRDS				
American oystercatcher	<i>Haematopus palliatus</i>		SSC	Shoreline
Bald eagle	<i>Haliaeetus leucocephalus</i>	T	T	Coastline, lakes
Black skimmer	<i>Rhychops niger</i>		SSC	Shoreline

TABLE 3-2
LISTED PLANT AND ANIMAL SPECIES DOCUMENTED AT TYNDALL AFB OR IN ITS IMMEDIATE VICINITY
EA for Alternate Drone Launch System at Tyndall AFB

Common Name	Scientific Name	Federal Status (USFWS)	State Status (FFWCC or FDACS)	Habitat Type
Brown pelican	<i>Pelecanus occidentalis</i>		SSC	Barrier island, bays
Least tern	<i>Sterna antillarum</i>		T	Barrier island, shoreline
Little blue heron	<i>Egretta caerulea</i>		SSC	Marshes, ponds, lakes
Osprey	<i>Pandion haliaetus</i>		SSC	Coastline, lakes
Peregrine falcon	<i>Falco peregrinus tundrius</i>	ce	E	Open habitats
Piping plover	<i>Charadrius melodus</i>	T /CH	T	Barrier island
Reddish egret	<i>Egretta rufescens</i>		SSC	Brackish marsh, shallow coastline
Snowy egret	<i>Egretta thula</i>		SSC	Marshes, lakes, ponds, shallow coastline
Snowy plover	<i>Charadrius alexandrinus tenuirostris</i>	ce	T	Barrier island
Southeastern American kestrel	<i>Falco sparverius paulus</i>	ce	T	Open, partly open habitat
Tricolor heron	<i>Egretta tricolor</i>		SSC	Marshes, ponds
White ibis	<i>Eudocimus albus</i>		SSC	Marshes, lakes
REPTILES				
Alligator snapping turtle	<i>Macrolemys temminckii</i>	ce	SSC	Freshwater lakes
American alligator	<i>Alligator mississippiensis</i>	T (S/A)	SSC	Lakes, marshes
Gopher tortoise	<i>Gopherus polyphemus</i>	ce	SSC	Long leaf pine, sand pine scrub
Green sea turtle	<i>Chelonia mydas mydas</i>	E	E	Marine, barrier island
Gulf salt marsh snake	<i>Nerodia clarkia clarkii</i>	ce		Needle grass, estuaries
Kemp's ridley turtle	<i>Lepidochelys kempi</i>	E	E	Marine
Leatherback sea turtle	<i>Dermochelys coriacea</i>	E	E	Marine, barrier island
Loggerhead sea turtle	<i>Caretta caretta</i>	T	T	Marine, barrier island
MAMMALS				
Choctawatchee beach mouse	<i>Peromyscus polionotus allophrys</i>	E / CH	E	Barrier island
Florida black bear	<i>Ursus americanus floridanus</i>	ce	T	Swamps, forested areas
Manatee	<i>Trichechus manatus</i>	E	E	Marine
St. Andrews beach mouse	<i>Peromyscus polionotus peninsularis</i>	E	E	Barrier island
FISH				
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>	T / CH	SSC	Marine, large rivers
E	Endangered			
T	Threatened			
T(S/A)	Threatened by similarity of appearance			
SSC	Species of Special Concern			
CH	Critical Habitat Designated			

TABLE 3-2
LISTED PLANT AND ANIMAL SPECIES DOCUMENTED AT TYNDALL AFB OR IN ITS IMMEDIATE VICINITY
EA for Alternate Drone Launch System at Tyndall AFB

	Common Name	Scientific Name	Federal Status (USFWS)	State Status (FFWCC or FDACS)	Habitat Type
Ce	Consideration Encouraged				
USFWS	U.S. Fish & Wildlife Service				
FFWCC	Florida Fish & Wildlife Conservation Commission				
FDACS	Florida Department of Agriculture & Consumer Services				

Most of the listed species at Tyndall AFB occur on the barrier islands or within wetlands where interactions with the military mission are minimal. The beaches of the barrier islands are important nesting sites for loggerhead sea turtles as well as for listed shorebirds such as the least tern, black skimmer, and piping plover. The dunes are crucially important habitat for the Choctawhatchee and St. Andrews beach mice. Shell Island from the western boundary of the Base to lands end (Choctawhatchee beach mouse), all of the coastal and bay beaches (piping plover), and the entire gulf frontage from the shoreline to 1½ miles out (Gulf sturgeon) have been designated as Critical Habitat by USFWS. Additionally, all beach and dune habitats on Shell Island and Crooked Island East and Crooked Island West have been designated Critical Wildlife Areas from 1 April to 15 September by USFWS.

Based on its habitat type and location, the site of the proposed alternate drone launch system is not expected to contain any listed plant species or be utilized by any listed animal species. No listed plant or animal species were sighted at the site during the field investigation conducted for this EA. Several state-listed plant species are known to occur in the wet prairie located southwest of the site (see Table 3-2). The wet prairie as well as the salt marshes south of the site also provide suitable foraging habitat for several state-listed wading bird species.

3.6 Land Use

Based on the 2004 Tyndall AFB General Plan, the drone launch facility and its immediate surroundings, including the site of the proposed alternate drone launch system, are classified as Industrial land use. Although the site of the proposed alternate drone launch system is currently undeveloped and not within the fenced boundaries of the drone launch facility, it is considered part of the overall facility property.

3.7 Transportation

The Tyndall AFB peninsula is bisected by U.S. Highway 98, which serves as the primary artery for access to and from the Base. Access to the main Base property north of the highway is provided through Tyndall Gate. Access to the main Base property south of the highway is provided by Sabre and Illinois Gates.

The site of the proposed alternate drone launch system is located adjacent to the eastern side of the drone launch facility, which can be accessed directly off of U.S. Highway 98. An unpaved road parallels the western side of the site. This road can be accessed from the

northeastern part of the drone launch facility. A locked gate exists at the entrance of this road and access is restricted to authorized personnel.

3.8 Environmental Compliance

325 Civil Engineer/Environmental Flight (CES/CEV) has primary responsibility for the management of air emissions; wastewater and storm water discharge; solid waste disposal and recycling; fuels storage; hazardous substances (e.g., hazardous materials and hazardous waste) authorization, storage, and disposal; petroleum, oil, and lubricant (POL) contamination compliance, and the Base Installation Restoration Program (IRP) for the Base.

Sanitary wastewater that is generated at the drone launch facility is collected in a septic tank. Wastewater is removed from the septic tank by a contractor and hauled off base for treatment. Non-hazardous solid waste that is generated at the drone launch facility is collected and disposed off Base by a contractor. Stormwater pollution prevention measures are implemented at the facility to ensure operations do not result in the discharge of contaminated stormwater.

Hazardous substances used at the drone launch facility primarily include paint products, stripping elements, acids, fuels, solvents, and pesticides. The Tyndall AFB Hazardous Materials Management Office (HAZMO) is responsible for the management of hazardous materials at the Base, including the drone launch facility. The hazardous wastes that are generated are temporarily stored at hazardous waste accumulation points. Hazardous waste is transported off Base by a contractor and disposed of in accordance with applicable regulations.

Tyndall AFB has several sites where POL contamination of the soil and/or groundwater has been identified. Investigations of these sites are managed by the 325 CES/CEV POL Compliance Program in accordance with Chapter 62-770, F.A.C. and the Base Petroleum Contamination Agreement with FDEP. These sites are in various stages of investigation, cleanup, monitoring, and closure.

The IRP was established by DoD in 1983 to identify, characterize, and remediate sites on military installations that were contaminated prior to 1984 in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Sites that have been contaminated since 1984 are addressed under the appropriate environmental compliance cleanup program. At present, Tyndall AFB has 16 active IRP sites.

The site of the proposed alternate drone launch system is entirely undeveloped. No activities that require environmental compliance currently occur at the site. There are no POL-contaminated sites or IRP sites at or within the vicinity of the site of the proposed alternate drone launch system.

3.9 Cultural Resources

Cultural resources are prehistoric and historic sites, structures, districts, artifacts, or any other physical source of human activity considered to be culturally important. Cultural resources include historic resources (historic buildings and structures) and archaeological resources (prehistoric, historic, and traditional).

The 2003 – 2007 Tyndall AFB Integrated Cultural Resources Management Plan (ICRMP) provides guidance on how to identify, evaluate, and treat cultural resources at the Base in compliance with DoD and state regulations. Development and approval requirements for the Base ICRMP are included in Air Force Policy Directive (AFPD) 32-70, *Environmental Quality*, and AFI 32-7065, *Cultural Resources Management*.

Numerous cultural resources surveys have been conducted at Tyndall AFB over the last 100 years. A total of 96 cultural resource sites have been identified by these surveys to date. Of these sites that have been identified, 22 have been recommended as eligible or potentially eligible for listing in the National Register of Historic Places (NRHP).

Based on the Tyndall AFB ICRMP, no historic structures or archaeological sites have been identified at or in the vicinity (within one mile) of the site of the proposed alternate drone launch system. For this EA, a Phase I archaeological survey of the site was conducted by Brockington and Associates, Inc. in December 2007. During the survey, one previously unknown archaeological site was identified within the clear area footprint of the proposed alternate drone launch system. This site was determined to be the remains of an early twentieth century homestead. The findings of the archaeological survey and correspondence with SHPO are discussed further in Section 4.9.

3.10 Socioeconomics

The population of Bay County in 2000 was 148,217 (U.S. Bureau of the Census, 2000). Panama City, which is the largest of eight municipalities in the County, had a population of 36,417 in 2000. The population of Bay County increased by 16.7 percent since 1990, while the population of the entire State of Florida increased by 24 percent during the same time period. Based on the 2004 Tyndall AFB General Plan, Tyndall AFB has approximately 4,400 military personnel, 3,400 military dependents, and 2,000 civilian employees. Over 9,000 military retirees reside near the Base.

The average civilian labor force in Bay County in 2003 was 71,864 (U.S. Bureau of Labor Statistics, 2003). Total employment in the County in 2003 was 67,977, while the unemployment rate was 5.4 percent. The State of Florida had an unemployment rate of 5.2 percent during the same year.

The services and retail-trade sectors accounted for approximately 56 percent of the total employment in Bay County in 2002 (U.S. Bureau of Labor Statistics, 2003). These sectors are primarily fueled by tourism, which generates approximately \$1.5 billion in annual revenues for the County. The government sector, half of which is represented by federal civilian and military employment, accounted for approximately 17 percent of the total employment in the County in 2002.

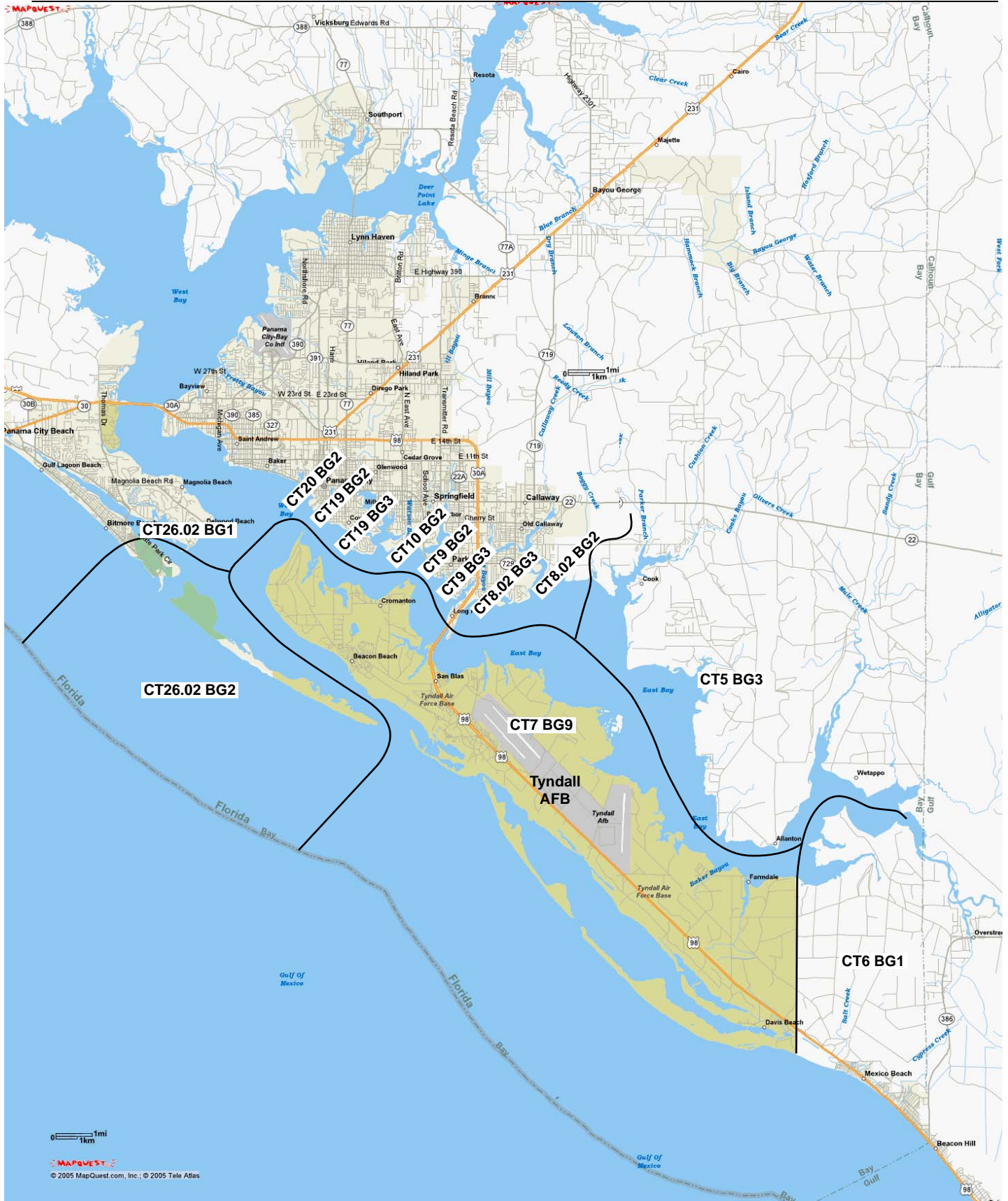
The largest contributors to the economy of Bay County are Tyndall AFB, Bay County School Board, and the U.S. Navy's Coastal Systems Station. Based on the 2004 Tyndall AFB General Plan, the total annual estimated economic impact of Tyndall AFB within a 50-mile radius of the Base is \$471 million. Based on the General Plan, Tyndall AFB has an annual military payroll of \$225 million, an annual civilian payroll of \$186 million, and contracts with local enterprises totaling \$110 million.

3.11 Environmental Justice

On February 11, 1994, the President issued EO 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations. This EO requires federal agencies to address disproportionate environmental and human health impacts from federal actions on minority populations and low-income populations. The President directed all federal agencies to analyze the environmental effects on minority and low-income communities, including human health, social, and economic effects.

The Air Force's *Guide for Environmental Justice Analysis With the Environmental Impact Analysis Process (EIAP)* provides guidance on how environmental justice should be analyzed in conjunction with EIAP in accordance with NEPA (Department of the Air Force, 1997). According to this guidance, minority and low-income populations that exist within the vicinity of the Proposed Action should be identified. If the Proposed Action would have no impact on human populations, or if the impact that it would have would not be adverse, the Proposed Action would not disproportionately impact minority or low-income populations. If the Proposed Action is determined to have an adverse impact on human populations, then the environmental justice analysis should be conducted in accordance with the guidance to determine if it would disproportionately impact minority or low-income populations.

Table 3-3 presents Year 2000 race, ethnicity, and poverty demographics for the Census Tracts (CTs) and Block Groups (BGs) that include, and are in the immediate vicinity of, Tyndall AFB. CTs are defined for the purpose of taking a census. BGs are subdivisions of CTs. The locations of the CTs and BGs are shown on Figure 3-2.



Source: Mapquest.com



0 2 4
Scale in Miles

CT Census Tract
BG Block Group
— Approximate CT Boundaries

FIGURE 3-2
Census Tract Locations
EA for Alternate Drone Launch System at Tyndall AFB

TABLE 3-3
 RACE, ETHNICITY, AND POVERTY DEMOGRAPHICS BY PERCENTAGE OF POPULATION
EA for Alternate Drone Launch System at Tyndall AFB

Percentage	Census Tract 7, Block Group 9 ^a	Census Tract 6, Block Group 1	Census Tract 5, Block Group 2	Census Tract 8.02, Block Group 2	Census Tract 8.02, Block Group 3	Census Tract 9, Block Group 2	Census Tract 9, Block Group 3	Census Tract 10, Block Group 2	Census Tract 19, Block Group 2	Census Tract 19, Block Group 3	Census Tract 20, Block Group 2	Census Tract 26.02, Block Group 1	Census Tract 26.02, Block Group 2	Bay County Florida	Florida
White	74.80%	95.70%	93.27%	84.2%	73.4%	77.5%	87.9%	62.3%	94.9%	96.0%	79.0%	94.0%	95.2%	84.20%	77.99%
African American	14.20%	1.30%	3.55%	7.6%	16.9%	13.8%	6.3%	28.8%	1.9%	1.4%	16.9%	1.0%	0.9%	10.60%	14.61%
American Indian/ Alaska Native	0.50%	0.50%	0.75%	0.2%	0.8%	1.2%	0.7%	1.5%	0.9%	0.5%	0.5%	0.9%	0.7%	0.80%	0.34%
Asian	3.10%	0.80%	1.12%	4.9%	4.0%	2.9%	2.2%	3.7%	1.6%	0.4%	1.0%	1.7%	0.4%	1.70%	1.67%
Native Hawaiian/ Other Pacific Islander	0.00%	0.40%	0.00%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.2%	0.1%	0.0%	0.10%	0.05%
Some other race	2.80%	0.00%	0.00%	1.2%	1.5%	1.1%	0.8%	0.2%	0.0%	0.4%	1.1%	0.7%	0.2%	0.70%	2.99%
Two or more races	4.60%	1.40%	1.31%	1.7%	3.4%	3.5%	2.0%	3.5%	0.7%	1.3%	1.3%	1.6%	2.6%	1.90%	2%
Subtotal: One Race	95.40%	98.60%	98.7%	98.3%	96.6%	96.5%	98.0%	96.5%	99.3%	98.7%	98.7%	98.4%	97.4%	98.10%	97.65%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Hispanic ^b	8.30%	1.20%	1.4%	2.6%	4.4%	1.9%	2.9%	1.9%	0.4%	1.4%	4.5%	2.2%	5.5%	2.40%	16.79%
Poverty Status	3.10%	11.50%	8.70%	9.61%	8.51%	17.23%	10.65%	25.96%	15.22%	3.52%	28.70%	10.18%	18.69%	12.70%	12.50%
Children Under 17	37.90%	11.10%	21.31%	26.53%	27.72%	25.49%	18.28%	29.14%	13.54%	21.64%	10.25%	22.9%	13.51%	24%	22.70%

^a Includes most of Tyndall AFB.

^b Hispanic or Latino (of any race). For Census 2000 and the American Community Survey: People who identify with the terms "Hispanic" or "Latino" are those who classify themselves in one of the specific Hispanic or Latino categories listed on the Census 2000 or ACS questionnaire—"Mexican," "Puerto Rican," or "Cuban"—as well as those who indicate that they are "other Spanish, Hispanic, or Latino." Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Spanish, Hispanic, or Latino may be of any race.

Source: U.S. Bureau of the Census 2000. <http://factfinder.census.gov>.

SECTION 4

Environmental Consequences

4.1 Air Quality

4.1.1 Proposed Action

Constructing the alternate drone launch system under the Proposed Action would result in short-term, minor impacts to air quality. Fugitive dust (particulate matter) and construction vehicle exhaust emissions would be generated during construction and would vary daily, depending on the level and type of work conducted.

Fugitive dust would be generated by construction vehicle and equipment travel on dirt surfaces and by wind action on stockpiled materials. Fugitive dust from stockpiled materials would consist primarily of nontoxic particulate matter. Fugitive dust would be controlled at the site using best management practices (BMPs), such as periodic watering of stockpiled materials.

Pollutants that would be emitted from the internal combustion engine exhausts of construction vehicles and equipment include nitrogen oxide (NO_x), CO, PM₁₀, and volatile organic compounds (VOCs). These types of exhaust emissions would be temporary, and at their expected generation levels, would not significantly impact air quality. Fugitive dust and exhaust emissions from the proposed construction activity would not collectively represent a new major source of air emission, and, therefore, would not require a modification to the minor air operation permit under which Tyndall AFB operates. Operation of the proposed alternate drone launch system would also not include any new source of air emission that would be regulated under this permit. The sled that carries the drone on the track of the system would be powered by steam propulsion and, therefore, would not produce any air emissions. The proposed system would not increase the overall number of drone launches conducted by the 53 WEG and, therefore, would not result in an increase in drone air emissions.

For these reasons, the Proposed Action would have a minor impact on air quality.

4.1.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on air quality.

4.2 Noise

4.2.1 Proposed Action

As discussed in Section 3-2, typical construction work generates noise levels in the range of 78 to 89 dBA approximately 50 ft from the construction area. Based on the EPA publication, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, PB 206717 (EPA, 1971), noise levels at 50 ft from a source decrease by approximately 3 dBA over a hard, unobstructed surface (such as asphalt), and by approximately 4.5 dBA over a

soft surface (such as vegetation). The maximum acceptable noise level for most residential land uses is generally considered to be 65 dBA DNL.

Constructing the alternate drone launch system under the Proposed Action would temporarily increase ambient noise levels at and around the construction site. The increased noise levels would be short term and limited to normal working hours. Based on the EPA estimates of noise dissipation previously described, construction-related noise would be negligible or not audible in the nearest noise-sensitive areas given that the nearest on-base noise-sensitive areas are located several miles to the northwest and the nearest off-base noise-sensitive areas are located approximately 3 miles to the northeast.

During operation of the proposed alternate drone launch system, noise would be generated by the steam propulsion system, and by the sled, drone, and track as the sled and attached drone travel on the track (vibration, friction, and wind). The proposed system would produce less noise during a drone launch than the currently used system. The noise levels generated by the proposed steam propulsion system would be significantly lower than those generated by RATO bottles which are based on fuel combustion. The proposed alternate drone launch system would be operated intermittently and during normal working hours. The noise generated would be of relatively short duration and is expected to be negligible or not audible in the nearest noise-sensitive areas.

For these reasons, the Proposed Action would have minor noise impacts.

4.2.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no noise-related effects.

4.3 Geology, Topography, and Soils

4.3.1 Proposed Action

Constructing the alternate drone launch system under the Proposed Action would not involve any intrusive construction activity that would impact subsurface geological formations. Because the site where the proposed system would be constructed is relatively flat, significant land contouring would not be required. Construction of the system would have minor impacts on soils during site clearing and grading. Sediment and erosion controls would be implemented during construction to prevent any indirect impacts to surrounding soils. Such controls may include silt fences and hay bales. Operation of the system would not involve any activity that would affect geology, topography, or soils in any manner.

For these reasons, the Proposed Action would have no effect on geology and a minor impact on topography and soils.

4.3.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on geology, topography, or soils.

4.4 Water Resources

4.4.1 Groundwater

4.4.1.1 Proposed Action

Constructing the alternate drone launch system under the Proposed Action may have a negligible, temporary impact on the surficial groundwater table during construction. Little or no dewatering is expected to be required to construct the system. Operation of the system would not involve withdrawals from, or discharges to, groundwater. The existing water well at the drone launch facility would not be affected in any manner by the construction or operation of the proposed system.

For these reasons, the Proposed Action would have a minor impact on groundwater.

4.4.1.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on groundwater.

4.4.2 Surface Water

4.4.2.1 Proposed Action

Constructing the alternate drone launch system under the Proposed Action would not directly impact surface waters because none are located at or in the immediate vicinity of the proposed construction site. Construction of the system would not directly impact the upland-cut swales that exist on both sides of the unpaved road that parallels the western side of the site or the upland-cut ditches that exist on both sides of the unpaved trail located in the southern part of the site (see Figure 3-1). None of the concrete blocks that would support the rail track would be placed within these swales or ditches. Sediment and erosion controls would be implemented during construction of the proposed system to prevent any indirect impacts to surface waters. Such controls may include silt fences and hay bales.

The total impervious area that would result from the proposed alternate drone launch system would be 729 square ft (0.02 acre). Based on the amount of impervious area that would be created, the proposed system would be exempt from the storm water attenuation permitting requirements of NFWFMD. No hazardous materials would be stored at the site or used to operate the system; therefore, its operation would have no potential to directly or indirectly affect surface water quality.

For these reasons, the Proposed Action would have no effect on surface water.

4.4.2.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on surface water.

4.4.3 Floodplains

4.4.3.1 Proposed Action

The site of the proposed alternate drone launch system is not located within the 100-year floodplain. Construction or operation of the system under the Proposed Action would not involve any activity that would affect nearby floodplain areas in any manner.

For these reasons, the Proposed Action would have no effect on floodplains.

4.4.3.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on floodplains.

4.5 Biological Resources

4.5.1 Wetlands

4.5.1.1 Proposed Action

As discussed in Section 3.5.1, there are no jurisdictional wetlands at or within the immediate vicinity of the site of the proposed alternate drone launch system. The non-jurisdictional herbaceous depression at the site would not be directly impacted by the rail track of the proposed system. Sediment and erosion controls would be implemented during construction of the proposed system to prevent any indirect impacts to wetlands. Such controls may include silt fences and hay bales. Operation of the proposed system would not involve any activity that would affect wetlands in any manner.

For these reasons, the Proposed Action would have no effect on wetlands.

4.5.1.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on wetlands.

4.5.2 Vegetation

4.5.2.1 Proposed Action

As discussed in Section 3.5.2, the site of the proposed alternate drone launch system is mostly upland pine forest, with the northernmost part of the site being planted pine. In general, the tree density of the site decreases in the southern direction. The vegetative cover of the canopy and subcanopy within most of the site is approximately 20 percent and 5 percent, respectively. Construction of the rail track of the proposed alternate drone launch system would displace approximately 0.02 acre of vegetation. Trees and shrubs within the clear area footprint of the proposed system, which is approximately 3.7 acres in size, would be cut and the vegetation within this area would be maintained below a height of 2 ft. The pine would be harvested by the Base forestry program for commercial sale. Upland pine forest is very abundant at Tyndall AFB and is not considered an ecologically sensitive vegetative community. The planted pine portion of the site is considered a disturbed vegetative community. As such, the proposed impacts to these types of vegetation would be minor. Sediment and erosion controls would be implemented during construction of the proposed system to prevent any indirect impacts to surrounding vegetation. Such controls may include silt fences and hay bales. Operation of the proposed system would not involve any activity that would affect vegetation in any manner.

For these reasons, the Proposed Action would have a minor impact on vegetation.

4.5.2.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on vegetation.

4.5.3 Fish and Wildlife

4.5.3.1 Proposed Action

As discussed in Section 3.5.3, the site of the proposed alternate drone launch system provides moderate quality wildlife habitat because of its proximity to the drone launch facility. The site is considered to be part of the overall drone launch facility property and, therefore, it is not open to recreational hunting or managed by the Base wildlife management program. Construction of the rail track of the proposed alternate drone launch system would displace approximately 0.02 acre of upland pine habitat. Trees and shrubs within the clear area footprint of the proposed system, which is approximately 3.7 acres in size, would be cut and the vegetation within this area would be maintained below a height of 2 ft. Because the site is located adjacent to industrial land use and because the type of habitat at the site is very abundant at Tyndall AFB, the proposed impact to the habitat that the site provides would be minor.

Wildlife within the vicinity of the site may be temporarily disturbed by construction noise during the construction period; however the overall impact is expected to be minor. The noise that would be generated during operation of the proposed system has the potential to disturb wildlife within the vicinity of the site; however, the overall impact to wildlife is expected to be minor because the noise would be intermittent, of short duration, and at lower levels than the noise generated during operation of the current system (see Section 4.2.1). During existing drone launches, RATO bottles detach from the drone and fall onto the wet prairie or salt marsh, or into St. Andrews Sound. The proposed alternate drone launch system would not use RATO bottles; therefore, its operation would eliminate the impacts that spent RATO bottles have on these habitats.

For these reasons, the Proposed Action would have a minor impact on fish and wildlife.

4.5.3.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on fish and wildlife.

4.5.4 Listed Species

4.5.4.1 Proposed Action

As discussed in Section 3.5.4 the site of the proposed alternate drone launch system is not expected to contain any listed plant species or be utilized by any listed animal species based on its habitat type and location. No listed plant or animal species were sighted at the site during the field investigation conducted for this EA. Several state-listed plant species are known to occur in the wet prairie located southwest of the site (see Table 3-2). The wet prairie as well as the salt marshes south of the site also provide suitable foraging habitat for several state-listed wading bird species.

As discussed in Section 4.5.3, wildlife within the vicinity of the site of the proposed alternate drone launch system may be temporarily disturbed by construction noise during the construction period as well as by noise generated during drone launches. The overall impact that construction and operational noise would have on listed animal species that utilize the wet prairie southwest of the site and the salt marshes south of the site, such as listed wading bird species, is expected to be minor. Construction noise would be limited to the

construction period and operational noise would be intermittent, of short duration, and at lower levels than the noise generated during operation of the current system (see Section 4.2.1). As discussed in Section 4.5.3, the proposed alternate drone launch system would not use RATO bottles; therefore, its operation would eliminate the impacts that spent RATO bottles have on the wet prairie, salt marsh, and St. Andrews Sound.

In a response stamp dated 20 February 2008, USFWS issued the following finding for the Proposed Action: “The proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). This finding fulfills the requirements of the Act” (see Appendix B).

In a letter dated 26 March 2008, NMFS stated the following: “Based on the information in the EA, the NMFS agrees with your findings that the proposed action will not have a significant impact either by itself or considering cumulative impacts (see Appendix B).”

For these reasons, the Proposed Action would have a minor impact on listed species.

4.5.4.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on listed species.

4.6 Land Use

4.6.1 Proposed Action

The land use classification of the site of the proposed alternate drone launch system (Industrial) would not be changed by the Proposed Action. Therefore, the Proposed Action would have no effect on land use.

4.6.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on land use.

4.7 Transportation

4.7.1 Proposed Action

The Proposed Action does not involve the construction of new roads or modification of existing roads. The proposed alternate drone launch system would be operated by the personnel who operate the existing system. No personnel hires or relocations would occur under the Proposed Action. As such, the Proposed Action would not permanently increase traffic in the area. Construction of the proposed drone launch system would temporarily increase traffic in the area during construction; however, the projected increase is not expected to have a major burden on the road system in or around the area. After the system is constructed, traffic levels in the area would return to current levels.

For these reasons, the Proposed Action would have a minor impact on transportation.

4.7.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on transportation.

4.8 Environmental Compliance

4.8.1 Proposed Action

Construction and operation of the proposed alternate drone launch system would be conducted in coordination with 325 CES/CEV and in accordance with all applicable Tyndall AFB environmental management plans. Operation of the system would not include any new source of air emission that would be regulated under the Base air operation permit. No hazardous materials would be stored at the site or used to operate the system; therefore, its operation would have no potential to directly or indirectly affect surface water quality. Sediment and erosion controls would be implemented during construction of the proposed system to prevent any indirect impacts to surface waters. There are no POL-contaminated sites or IRP sites at or within the vicinity of the site of the proposed system.

For these reasons, the Proposed Action would have a minor impact on environmental compliance.

4.8.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on environmental compliance.

4.9 Cultural Resources

4.9.1 Proposed Action

As discussed in Section 3.9, there are no historic structures at or in the vicinity (within one mile) of the site of the proposed alternate drone launch system. Brockington and Associates, Inc. identified one previously unknown archaeological site within the project area during a Phase 1 archaeological survey conducted in December 2007 for this EA. No archaeological sites have been previously identified within or in the vicinity (within one mile) of the project area in the past. Brockington and Associates determined that the archaeological site is the remains of an early twentieth century homestead and that its limits extend beyond the boundaries of the clear area footprint of the proposed alternate drone launch system. Based on the survey findings, Brockington and Associates concluded that the portion of the archaeological site located within the clear area footprint of the proposed alternate drone launch system does not meet the criteria for NRHP eligibility and that no further work is required for this portion of the site. Brockington and Associates recommends that at a future date, Tyndall AFB completely delimit the site boundaries and render an assessment of NRHP eligibility for the undocumented portion of the site. The findings of the survey conducted by Brockington and Associates are presented in a report titled *Phase I Archaeological Survey of an Alternate Drone Launch System Site at Tyndall AFB*, dated December 2007. This report was submitted to SHPO for review. In a reply letter dated 17 March 2008, SHPO stated that it found Brockington and Associates' Phase I archaeological survey report for the Proposed Action site "complete and sufficient in accordance with Chapter 1A-46, Florida Administrative Code." SHPO also stated that "while no unequivocal eligibility determination can be made because the site extends outside the project area, we concur that no further investigation is warranted within the subject parcel" (see Appendix B). Through

the Florida State Clearinghouse, SHPO issued a finding of “No Comment/Consistent” for the Proposed Action (see Appendix B).

To satisfy the NEPA requirements regarding Native American tribal consultation for the EA, correspondence letters and copies of the draft EA were sent to the Native American tribes that have expressed an interest in Tyndall AFB for their ancestral ties (see Appendix B). The Miccosukee Tribe of Indians of Florida submitted the following comment: “The Tribe determined that there is no cultural, historical, or religious site of the Tribe at this location” (see Appendix B). No other comments were received from the tribes on the Proposed Action.

Standard Operating Procedures (SOPs) 5 and 6 of the Tyndall AFB ICRMP would be implemented in the event that cultural resources are discovered during construction of the proposed alternate drone launch system. SOP 5, *Unanticipated Discovery of Archaeological Deposits*, and SOP 6, *Unanticipated Discovery of Native American Remains*, provide policy and procedures for the protection, evaluation, and coordination of archaeological deposits and Native American remains, respectively, in the event they are unexpectedly discovered at Tyndall AFB.

For these reasons, the Proposed Action would have a minor impact on cultural resources.

4.9.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on cultural resources.

4.10 Socioeconomics

4.10.1 Proposed Action

The proposed alternate drone launch system would be operated by the personnel who operate the existing system. No personnel hires or relocations would occur under the Proposed Action. Therefore, the Proposed Action would not affect the demographics of the area. Construction of the proposed alternate drone launch system would have a negligible impact on the total labor force and employment in the region as a result of the small number of jobs that would be created. The labor force of the local area should be able to provide enough workers to perform the proposed construction activities without additional persons relocating to the area. Because the net increase in construction employment would be temporary and minimal, there would be no appreciable effect on the local economy. Expenditures for construction-related materials and supplies would have a small, short-term, beneficial effect on the economy of the region. Businesses near the Base such as gas stations and restaurants could benefit from additional sales to construction workers.

For these reasons, the Proposed Action would have a minor positive impact on socioeconomics.

4.10.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on socioeconomics.

4.11 Environmental Justice

4.11.1 Proposed Action

Construction and operation of the proposed alternate drone launch system would not result in adverse impacts associated with air quality, noise, groundwater, surface water, or hazardous materials and wastes. As a result, minorities and low-income residents living in proximity to the Proposed Action would not be disproportionately impacted. This analysis is considered valid regardless of the total number or percentage of minorities or low-income residents that live in proximity to the area, or the distance of their residences from the area.

For these reasons, the Proposed Action would have no effect on environmental justice.

4.11.2 No Action Alternative

The proposed alternate drone launch system would not be constructed under the No Action Alternative; therefore, the No Action Alternative would have no effect on environmental justice.

4.12 Cumulative Impacts

A “cumulative impact” is defined in 40 CFR 1508.7 as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Minor refurbishments to the drone launch facility and minor adjustments to the manner which the existing drone launch system is operated are the only actions that have occurred in the vicinity of the project area within the last five years. These actions did not result in any appreciable impact to any resource. As such, the coupling of the Proposed Action with these past actions would not result in adverse cumulative impacts to any resource. There are no ongoing actions and the only action planned for the foreseeable future in the vicinity of the project area is to discontinue operation of the existing drone launch system when the proposed alternate system becomes operational.

The potential impacts that the Proposed Action would have on air quality would be short-term and temporary, and are considered minor. When coupled with other sources at the Base that generate air emissions, the potential cumulative impacts to air quality would be minor given that all other combined sources generate emissions that are well below those generated by “major sources” under federal Title V permitting. Noise that would be generated by operation of the proposed alternate drone launch system would add to noise currently generated at the Base; however, the proposed alternate system would produce less noise during a drone launch than the existing system and operation of the existing system would be discontinued when the alternate system becomes operational. Based on the characteristics of the site of the proposed alternate drone launch system, the Proposed Action would not result in adverse cumulative impacts to soils, vegetation, or habitat. The Proposed Action would have some minor positive cumulative impacts on the local economy resulting from short-term, temporary increases in employment and expenditures during construction.

4.13 Mitigation Measures

Based on the findings of this EA, the Proposed Action would not adversely impact any resource analyzed. Therefore, no mitigation measures would be necessary for the Proposed Action. The use of BMPs and protective measures during construction activities would minimize potential indirect impacts on the environment. Sediment and erosion controls would be implemented during construction. Such controls may include the installation of silt fences and/or hay bales.

SECTION 5

List of Preparers

Name	Organization	Title	Primary Responsibility
Tunch Orsoy	CH2M HILL	Environmental Scientist	Project Manager
Steve Swingle	CH2M HILL	Environmental Scientist	Senior Reviewer
Angela Gable	CH2M HILL	Ecologist	Water Resources
Kira Zender	CH2M HILL	Planner	Socioeconomics
Robin Nagy	CH2M HILL	Word Processor	Document Production
Marian Stuart	CH2M HILL	Graphics Specialist	Document Graphics

SECTION 6

List of Persons and Agencies Consulted

Kevin Brackin, MAJ, 82 ATRS/ADO, Tyndall AFB, Florida

Dan Chandler, MAJ, 82 ATRS/DOQ, Tyndall AFB, Florida

Jose Cintron, Environmental Planning Lead, 325 CES/CEV, Tyndall AFB, Florida

Laura Kammerer, State Historic Preservation Officer, Tallahassee, Florida

Steve McLellan, Environmental Compliance Chief, 325 CES/CEVC, Tyndall AFB, Florida

Lauren Milligan, Coordinator, Florida State Clearinghouse, Florida Department of Environmental Protection, Tallahassee, Florida

Janet Mizzi, Deputy Field Supervisor, U. S. Fish & Wildlife Service, Panama City, Florida

Jack Mobley, Wildlife Biologist, 325 CES/CEVN, Tyndall AFB, Florida

Wes Smith, Base Planner, 325 CES/CEV, Tyndall AFB, Florida

Bryan Uthe, 1LT, 82 ATRS/DOQP, Tyndall AFB, Florida

Wesley Westphal, Natural Resources Manager, 325 CES/CEVN, Tyndall AFB, Florida

SECTION 7

References

Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. *Classification of Wetlands and Deepwater Habitats of the United States*. U. S. Department of the Interior, Fish and Wildlife Service. Office of Biological Services. 47 pp. 1979.

Department of the Air Force. 1997. *Guide for Environmental Justice Analysis With the Environmental Impact Analysis Process (EIAP)*. November.

Federal Interagency Committee on Urban Noise. 1980. *Guidelines for Considering Noise in Land-Use Planning and Control*. June.

Florida Fish & Wildlife Conservation Commission. 2005. *Florida's Endangered Species, Threatened Species, and Species of Special Concern*.

Tyndall Air Force Base. 2004. *Tyndall AFB General Plan*

Tyndall Air Force Base (AFB). 2003. *Tyndall AFB Integrated Cultural Resources Management Plan, Tyndall AFB, Florida*

U.S. Bureau of the Census. 2004. <http://factfinder.census.gov>.

U.S. Bureau of the Census. 2000. <http://factfinder.census.gov/>.

U.S. Bureau of Labor Statistics. 2003. <http://stats.bls.gov/>.

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service. 1984. *Soil Survey of Bay County, Florida*.

Coastal Zone Management Consistency Determination

The federal Coastal Zone Management Act (CZMA) provides assistance to states, in cooperation with federal and local agencies, for developing land and water use programs in coastal zones. According to Section 307 of the CZMA, federal projects that affect land uses, water uses, or coastal resources in a state's coastal zone must be consistent, to the maximum extent practicable, with the enforceable policies of that state's federally approved coastal zone management plan. The Florida Coastal Management Program (FCMP) is based on a network of state agencies implementing 23 statutes that protect and enhance Florida's natural, cultural, and economic coastal resources. The Florida Department of Environmental Protection (FDEP) implements the FCMP and makes the state's final consistency determination, which will either agree or disagree with the applicant's own consistency determination.

Table A-1 provides Tyndall AFB's Coastal Zone Management Consistency Determination for the Proposed Action.

TABLE A-1
COASTAL ZONE MANAGEMENT CONSISTENCY DETERMINATION
EA for Alternate Drone Launch System at Tyndall AFB

Statute	Consistency	Scope
Chapter 161 <i>Beach and Shore Preservation</i>	Based on the EA, the Proposed Action would not involve any activity that would be inconsistent with this statute. The proposed system would be in compliance with the State's beach and shore preservation policies and regulations.	Authorizes the Bureau of Beaches and Coastal Systems within FDEP to regulate the construction on or seaward of the state's beaches.
Chapter 163, Part II <i>Local Government Comprehensive Planning and Land Development Regulation Act</i>	Not applicable to the Proposed Action.	Requires local governments to prepare, adopt, and implement comprehensive plans that encourage the most appropriate use of land and natural resources in a manner consistent with the public interest.
Chapter 186 <i>State and Regional Planning</i>	Not applicable to the Proposed Action.	Details the state-level planning requirements. Requires the development of special statewide plans governing water-use, land development, and transportation.
Chapter 252 <i>Emergency Management</i>	Not applicable to the Proposed Action.	Provides for the planning and implementation of the state's response to natural and manmade disasters, efforts to recover from natural and manmade disasters, and the mitigation of natural and manmade disasters.

TABLE A-1
COASTAL ZONE MANAGEMENT CONSISTENCY DETERMINATION
EA for Alternate Drone Launch System at Tyndall AFB

Statute	Consistency	Scope
Chapter 253 <i>State Lands</i>	Not applicable to the Proposed Action.	Addresses the state's administration of public lands and property the state and provides direction regarding the acquisition, disposal, and management of all state lands.
Chapter 258 <i>State Parks and Preserves</i>	Not applicable to the Proposed Action.	Addresses the administration and management of state parks and preserves.
Chapter 259 <i>Land Conservation Act of 1972</i>	Not applicable to the Proposed Action.	Authorizes acquisition of environmentally endangered lands and outdoor recreation lands.
Chapter 260 <i>Recreational Trails System</i>	Not applicable to the Proposed Action.	Authorizes the acquisition of land to create a recreational trails system and to facilitate the management of the system.
Chapter 267 <i>Archives, History, and Records Management</i>	Based on the EA, the Proposed Action would not involve any activity that would be inconsistent with this statute. The proposed system would not impact any cultural resource that is eligible for NRHP eligibility.	Addresses the management and preservation of the state's archaeological and historical resources.
Chapter 288 <i>Commercial Development and Capital Improvements</i>	Not applicable to the Proposed Action.	Provides the framework for promoting and developing the general business, trade, and tourism components of the state economy.
Chapter 334 <i>Transportation Administration</i>	Not applicable to the Proposed Action.	Addresses the state's policy concerning transportation administration.
Chapter 339 <i>Transportation Finance</i>	Not applicable to the Proposed Action.	Addresses the finance and planning needs of the state's transportation system.
Chapter 370 <i>Saltwater Fisheries</i>	Based on the EA, the Proposed Action would not involve any activity that would be inconsistent with this statute. The proposed system would not directly or indirectly impact the State's saltwater fisheries in any manner.	Addresses the management and protection of the state's saltwater fisheries.
Chapter 372 <i>Wildlife</i>	Based on the EA, the Proposed Action would not involve any activity that would be inconsistent with this statute. The proposed system would not result in adverse impacts to the State's wildlife resources.	Addresses the management of the wildlife resources of the state.
Chapter 373	Based on the EA, the Proposed Action would	Addresses the state's policy

TABLE A-1
COASTAL ZONE MANAGEMENT CONSISTENCY DETERMINATION
EA for Alternate Drone Launch System at Tyndall AFB

Statute	Consistency	Scope
<i>Water Resources</i>	not involve any activity that would be inconsistent with this statute. The proposed system would not result in adverse impacts to the State's water resources.	concerning water resources.
Chapter 375 <i>Outdoor Recreation and Conservation</i>	Not applicable to the Proposed Action.	Develops a comprehensive multipurpose outdoor recreation plan to document recreational supply and demand, describe current recreational opportunities, estimate the need for additional recreational opportunities, and propose the means to meet the identified needs.
Chapter 376 Pollutant Discharge, Prevention and Removal	Based on the EA, the Proposed Action would not involve any activity that would be inconsistent with this statute. The proposed system would be in compliance with the State's pollutant discharge, prevention, and removal policies and regulations.	Regulates the transfer, storage, and transportation of pollutants, and the cleanup of pollutant discharges.
Chapter 377 <i>Energy Resources</i>	Not applicable to the Proposed Action.	Addresses the regulation, planning, and development of the energy resources of the state.
Chapter 380 <i>Land and Water Management</i>	Not applicable to the Proposed Action.	Establishes land and water management policies to guide and coordinate local decisions relating to growth and development.
Chapter 381 Public Health; General Provisions Sections 381.001, 381.0011, 381.0012, 381.006, 381.0061, 381.0065, 381.0066, 381.0067	Not applicable to the Proposed Action.	Establishes public policy concerning the state's public health system.
Chapter 388 <i>Mosquito Control</i>	Not applicable to the Proposed Action.	Addresses the mosquito control effort in the state.
Chapter 403 <i>Environmental Control</i>	Based on the EA, the Proposed Action would not involve any activity that would be inconsistent with this statute. The proposed system would be in compliance with the State's environmental control policies and regulations.	Establishes public policy concerning environmental control in the state.
Chapter 582 <i>Soil and Water Conservation</i>	Based on the EA, the Proposed Action would not involve any activity that would be inconsistent with this statute. The proposed system would be in compliance with the State's soil and water conservation policies and regulations.	Provides for the control and prevention of soil erosion.

Regulatory Agency and Native American Tribal Correspondence



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Mr. Mark Thompson
National Marine Fisheries Service
3500 Delwood Beach Road
Panama City, FL 32408

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable federal and state agencies prior to implementation of the Proposed Action. The EA is also undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect any marine species or essential fish habitat.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.

A handwritten signature in cursive script that reads "Joseph V. McLernan".

JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Ms. Janet Mizzi
U.S. Fish & Wildlife Service
1601 Balboa Avenue
Panama City, Florida 32405

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable federal and state agencies prior to implementation of the Proposed Action. The EA is also undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect any state or federally listed species or their habitats.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.

Joseph V. McLernan
JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Lauren Milligan
Florida State Clearinghouse
3900 Commonwealth Boulevard
Mail Station 47
Tallahassee, Florida 32399-3000

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and
Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable state agencies prior to implementation of the Proposed Action. Tyndall AFB's Coastal Zone Management Consistency Determination finds that the Proposed Action is consistent with the Florida Coastal Management Program.

The State's Consistency Determination and comments should be submitted within 60 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.


JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing EA and FONSI (10 CDs and 2 hardcopies)



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Adele Head
Bay County Public Library
25 West Government Street
Panama City, Florida 32401

SUBJECT: Public Review of 325th Fighter Wing Draft Environmental Assessment and Finding of
No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No
Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch
System at Tyndall Air Force Base (AFB).

The 325th Fighter Wing, Tyndall AFB requests that the Draft EA and FONSI be kept in your
library and made available for review to any interested party upon request during its 30-day
public review period from February 17 - March 18, 2008. At the end of the review period, we
will pick up the documents.

Please direct any questions regarding this request to Mr. Jose J. Cintron at (850) 283-4341.
Thank you very much for your assistance.


JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Gingy Nail
Historic Preservation Officer
Chickasaw Nation of Oklahoma
Post Office Box 1548
Ada, Oklahoma 74821-1548

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and
Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No
Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch
System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination
on EAs and FONSI by applicable Native American Tribes prior to implementation of the
Proposed Action. The EA is also being coordinated with the Florida State Historic Preservation
Officer, and is undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect Native
American cultural resources.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325
CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.;
telephone: (850) 283-4341.


JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Terry Cole
Choctaw Nation of Oklahoma
Cultural Resources
Post Office Drawer 1210
Durant, Oklahoma 74702

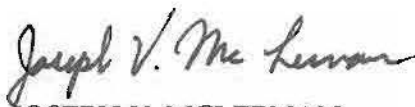
SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and
Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No
Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch
System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination
on EAs and FONSI by applicable Native American Tribes prior to implementation of the
Proposed Action. The EA is also being coordinated with the Florida State Historic Preservation
Officer, and is undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect Native
American cultural resources.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325
CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.;
telephone: (850) 283-4341.


JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Steven Terry
Historic Preservation Officer
Miccosukee Tribe of Indians of Florida
Post Office Drawer 440021
Miami, Florida 33144

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and
Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable Native American Tribes prior to implementation of the Proposed Action. The EA is also being coordinated with the Florida State Historic Preservation Officer, and is undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect Native American cultural resources.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.

A handwritten signature in dark ink, reading "Joseph V. McLernan", is positioned above the printed name.

JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Kenneth Carleton
Historic Preservation Officer
Mississippi Band of Choctaw Indians
Post Office Box 6257
Choctaw, Mississippi 39350

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable Native American Tribes prior to implementation of the Proposed Action. The EA is also being coordinated with the Florida State Historic Preservation Officer, and is undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect Native American cultural resources.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.

A handwritten signature in black ink, reading "Joseph V. McLernan".

JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Joyce A. Bear
Manager Cultural Preservation
Muscogee (Creek) Nation
Post Office Box 580
Okmulgee, Oklahoma 74447

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable Native American Tribes prior to implementation of the Proposed Action. The EA is also being coordinated with the Florida State Historic Preservation Officer, and is undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect Native American cultural resources.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.


JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Robert Thrower
Tribal Historic Preservation Officer
Poarch Band of Creek Indians
5811 Jack Springs Road
Ardmore, Alabama 36502

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable Native American Tribes prior to implementation of the Proposed Action. The EA is also being coordinated with the Florida State Historic Preservation Officer, and is undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect Native American cultural resources.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.


JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Bill Steele
Tribal Historic Preservation Officer
Seminole Tribe of Florida
Attention: Museum
1 Seminole Hotel
Hollywood, FL 33024

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and
Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable Native American Tribes prior to implementation of the Proposed Action. The EA is also being coordinated with the Florida State Historic Preservation Officer, and is undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect Native American cultural resources.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.

A handwritten signature in cursive script that reads "Joseph V. McLernan".

JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Pare Bowlegs
Historic Preservation Officer
Seminole Nation of Oklahoma
Post Office Box 1498
Wewoka, Oklahoma 74884

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable Native American Tribes prior to implementation of the Proposed Action. The EA is also being coordinated with the Florida State Historic Preservation Officer, and is undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect Native American cultural resources.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.


JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI



Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

April 8, 2008

Mr. Jose J. Cintron
Department of the Air Force
325 CES/CEV
119 Alabama Avenue
Tyndall, AFB, FL 32403

RE: Department of the Air Force - Draft Environmental Assessment,
Construction and Operation of an Alternate Drone Launch System at
Tyndall Air Force Base - Bay County, Florida.
SAI # FL200802114001C

Dear Mr. Cintron:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the referenced Draft Environmental Assessment (EA).

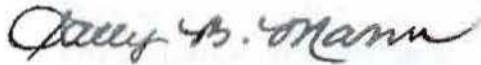
The Florida Department of Environmental Protection (DEP) advises that the subject project may require an Environmental Resource Permit (ERP) from the Northwest Florida Water Management District (NFWFMD). For further assistance and information on ERP permitting requirements, please contact Mr. Lee Marchman at the NFWFMD, phone (850) 539-5999.

Based on the information contained in the Draft EA and comments provided by our reviewing agencies, the state has determined that, at this stage, the proposed federal activities are consistent with the Florida Coastal Management Program (FCMP). The concerns identified by our reviewing agencies must, however, be addressed prior to project implementation. The state's continued concurrence with the project will be based, in part, on the adequate resolution of any issues identified during this and subsequent reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting stage, if applicable.

Mr. Jose J. Cintron
April 8, 2008
Page 2 of 2

Thank you for the opportunity to review the proposed project. Should you have any questions regarding this letter, please contact Ms. Lori Cox at (850) 245-2168.

Yours sincerely,

A handwritten signature in cursive script, reading "Sally B. Mann".

Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/lec
Enclosures

cc: Duncan Cairns, NFWFMD



Florida

Department of Environmental Protection

"More Protection. Less Process"



Categories

[DEP Home](#) | [OIP Home](#) | [Contact DEP](#) | [Search](#) | [DEP Site Map](#)

Project Information	
Project:	FL200802114001C
Comments Due:	03/14/2008
Letter Due:	04/08/2008
Description:	DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT, CONSTRUCTION AND OPERATION OF AN ALTERNATE DRONE LAUNCH SYSTEM AT TYNDALL AIR FORCE BASE - BAY COUNTY, FLORIDA.
Keywords:	USAF - ALTERNATE DRONE LAUNCH SYSTEM AT TYNDALL AFB - BAY CO.
CFDA #:	12.200
Agency Comments:	
WEST FLORIDA RPC - WEST FLORIDA REGIONAL PLANNING COUNCIL	
Based on the information provided, the proposed activity would not have any adverse direct, indirect or cumulative impacts on air quality, noise, geology, topography, soils, water resources, biological resources, land use, environmental compliance, cultural resources or environmental justice. Therefore, the Council has no comments or questions in regards to this proposal.	
BAY - BAY COUNTY	
FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION	
No Comments Received	
STATE - FLORIDA DEPARTMENT OF STATE	
No Comment/Consistent	
TRANSPORTATION - FLORIDA DEPARTMENT OF TRANSPORTATION	
Released Without Comment	
ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	
The Florida Department of Environmental Protection (DEP) advises that the subject project may require an Environmental Resource Permit (ERP) from the Northwest Florida Water Management District (NWFWM). For further information and assistance with ERP permitting requirements, please contact Mr. Lee Marchman at the NWFWM, phone (850) 539-5999.	
NORTHWEST FLORIDA WMD - NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT	
No Comment	

For more information or to submit comments, please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD, M.S. 47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

Visit the [Clearinghouse Home Page](#) to query other projects.

[Copyright and Disclaimer](#)
[Privacy Statement](#)

COUNTY: BAY
SCH - USAF - TY
2008-00568

DATE: 2/8/2008
COMMENTS DUE DATE: 3/14/2008
CLEARANCE DUE DATE: 4/8/2008
SAI#: FL200802114001C

MESSAGE:

STATE AGENCIES	WATER MNGMNT. DISTRICTS	OPB POLICY UNIT	RPCS & LOC GOVS
ENVIRONMENTAL PROTECTION	NORTHWEST FLORIDA WMD		
FISH and WILDLIFE COMMISSION			
X STATE			
TRANSPORTATION			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- X Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT, CONSTRUCTION AND OPERATION OF AN ALTERNATE DRONE LAUNCH SYSTEM AT TYNDALL AIR FORCE BASE - BAY COUNTY, FLORIDA.

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

EO. 12372/NEPA Federal Consistency

- | | |
|--|---|
| <input checked="" type="checkbox"/> No Comment | <input checked="" type="checkbox"/> No Comment/Consistent |
| <input type="checkbox"/> Comment Attached | <input type="checkbox"/> Consistent/Comments Attached |
| <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Inconsistent/Comments Attached |
| | <input type="checkbox"/> Not Applicable |

From:

Division/Bureau:

Division of Historical Resources
Bureau of Historic Preservation

Reviewer:

Samantha Earnest

Date:

03/19/08

3.19.2008

Laura A. Kammeyer
Deputy SHPO

RECEIVED
BUREAU OF
HISTORIC PRESERVATION
2008 FEB 13 A 10:17

COUNTY: BAY

DATE: 2/8/2008

COMMENTS DUE DATE: 3/14/2008

CLEARANCE DUE DATE: 4/8/2008

SAI#: FL200802114001C

MESSAGE:

STATE AGENCIES	WATER MNGMNT. DISTRICTS	OPB POLICY UNIT	RPCS & LOC GOVS
ENVIRONMENTAL PROTECTION	X NORTHWEST FLORIDA WMD		
FISH and WILDLIFE COMMISSION			
STATE			
TRANSPORTATION			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- X Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT, CONSTRUCTION AND OPERATION OF AN ALTERNATE DRONE LAUNCH SYSTEM AT TYNDALL AIR FORCE BASE - BAY COUNTY, FLORIDA.

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

EO. 12372/NEPA Federal Consistency

- | | |
|--|---|
| <input checked="" type="checkbox"/> No Comment | <input checked="" type="checkbox"/> No Comment/Consistent |
| <input type="checkbox"/> Comment Attached | <input type="checkbox"/> Consistent/Comments Attached |
| <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Inconsistent/Comments Attached |
| | <input type="checkbox"/> Not Applicable |

From:

Division/Bureau: NFWFMD
Resource Management Div.
Duncan J. Cairns
Reviewer: _____
Date: _____

Date: _____

RECEIVED
MAR 9 2008
OIP / GLCA



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

RECEIVED

FEB - 8 2008

Joseph V. McLernan
325th Civil Engineer Squadron
119 Alabama Ave
Tyndall AFB, FL 32403-5014

Ms. Janet Mizzi
U.S. Fish & Wildlife Service
1601 Balboa Avenue
Panama City, Florida 32405

SUBJECT: Request for Review of 325th Fighter Wing Draft Environmental Assessment and Finding of No Significant Impact

Please find enclosed the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base (AFB).

Thirty-two Code of Federal Regulations 989 (32 CFR 989) require review and coordination on EAs and FONSI by applicable federal and state agencies prior to implementation of the Proposed Action. The EA is also undergoing public and coastal zone management consistency reviews.

Based on the findings of the EA, the Proposed Action would not adversely affect any state or federally listed species or their habitats.

Comments should be submitted within 30 days after receipt to Mr. Jose J. Cintron, 325 CES/CEV, 119 Alabama Ave., Tyndall AFB, FL, 32403; email: jose.cintron@tyndall.af.mil.; telephone: (850) 283-4341.

Joseph V. McLernan

JOSEPH V. MCLERNAN
Chief, Environmental Flight

Attachment:
325th Fighter Wing Draft EA and FONSI

U.S. Fish and Wildlife Service
1601 Balboa Avenue
Panama City, Florida 32405

FWS Log No. 2008-I-0170



The proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) This finding fulfills the requirements of the Act.

Janet Mizzi
Janet Mizzi, Deputy Field Supervisor

2/20/08
Date



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701
(727) 824-5317; FAX 824-5300

March 26, 2008 F/SER46:MT/ml

Colonel John D. Byrd
Vice Commander, 325th Fighter Wing
Department of the Air Force
Air Education and Training Command
Tyndall Air Force Base, Panama City, Florida 32403

Dear Colonel Byrd:

NOAA's National Marine Fisheries Service (NMFS), Habitat Conservation Division, has reviewed the Draft Environmental Assessment (EA) Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base dated February 2008. The alternate drone launch system will eliminate the operational problems associated with the existing system and eliminate the use of the Rocket Assisted Take Off (RATO) bottles.

Based on the information in the EA, the NMFS agrees with your findings that the proposed action will not have a significant impact either by itself or considering cumulative impacts. However, in December 2005, we observed a launch that dropped the RATO bottle into the adjacent seagrass bed in St. Andrew Sound, and during the recovery effort, we noted a high number of old unrecovered RATO bottles and prop scars throughout the shallow water habitat. At that time, we did not address the existing conditions of the seagrass area, but since the RATO bottle use is being eliminated, along with the need to enter this area by the recovery boats, the restoration of the seagrass habitat to pre-impacted conditions should be considered. Accordingly, we request that this issue be addressed and are available to meet with you to assist in this regard.

We appreciate the opportunity to provide these comments. If you have any questions regarding this request, please contact Mr. Mark Thompson at our Panama City office at 850-234-5061 or, by email, at Mark.Thompson@noaa.gov.

Sincerely,

W. Mark Thompson

for
Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division

cev,
Prepared response
from Col. Byrd
Submitted: 15 April





FLORIDA DEPARTMENT OF STATE

Kurt S. Browning

Secretary of State

DIVISION OF HISTORICAL RESOURCES

Mr. Wesley J. P. Westphal, II
Chief, Environmental Conservation
325 CES/CEVB
119 Alabama Avenue, Stop 42
Tyndall Air Force Base, Florida 32403

March 17, 2008

Re: DHR Project File No.: 2008-00231 / Received by DHR: January 29, 2008
Additional Information Received: March 14, 2008
Phase I Archaeological Survey of an Alternate Drone Launch System Site at Tyndall Air Force Base, Bay County, Florida

Dear Mr. Westphal:

Our office received and reviewed the above referenced survey report in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 89-665), as amended in 1992, and *36 C.F.R., Part 800: Protection of Historic Properties*, for assessment of possible adverse impact to cultural resources (any prehistoric or historic district, site, building, structure, or object) listed, or eligible for listing, in the National Register of Historic Places (NRHP).

In December 2007, Brockington and Associates, Inc. (B&A) conducted an archaeological and historical Phase I survey of the Alternate Drone Launch System at Tyndall Air Force Base on CH2MHILL, Inc. B&A identified one previously unrecorded archaeological sites (8BY1350) within the project area during the investigation.

B&A determined that 8BY1350, the remains of an early-twentieth-century homestead, does not appear to be eligible for listing on the NRHP as it is expressed within the project area.

B&A determined that the proposed project will have no effect on historic properties listed, or eligible for listing on the NRHP. B&A recommends no further research within the surveyed area, but recommends that the portion of the site outside of the project area be fully documented and assessed for NRHP-eligibility.

Based on the information provided, our office concurs finds the submitted report complete and sufficient in accordance with Chapter 1A-46, *Florida Administrative Code*. While no unequivocal eligibility determination can be made because the site extends outside of the project area, we concur that no further investigation is warranted within the subject parcel.

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

☐ Director's Office
(850) 245-6300 • FAX: 245-6436

☐ Archaeological Research
(850) 245-6444 • FAX: 245-6452

☐ Historic Preservation
(850) 245-6333 • FAX: 245-6437

☐ Historical Museums
(850) 245-6400 • FAX: 245-6433

☐ South Florida Regional Office
(561) 416-2115 • FAX: 416-2149

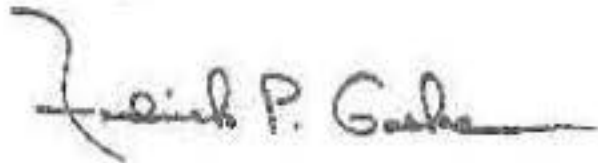
☐ North Florida Regional Office
(850) 245-6445 • FAX: 245-6435

☐ Central Florida Regional Office
(813) 272-3843 • FAX: 272-2340

Mr. Westphal
March 17, 2008
Page 2

For any questions concerning our comments, please contact April Westerman, Historic Preservationist, by electronic mail at anwesterman@dos.state.fl.us, or by phone at (850) 245-6333. We appreciate your continued interest in protecting Florida's historic properties.

Sincerely,

A handwritten signature in black ink, appearing to read "Frederick P. Gaske". The signature is fluid and cursive, with a long horizontal stroke at the end.

Frederick P. Gaske, Director, and
State Historic Preservation Officer

Xc: Steve Rabbysmith, Brockington and Associates, Inc.

From: Steve Terry [<mailto:SteveT@miccosukeetribe.com>]
Sent: Friday, February 15, 2008 2:00 PM
To: Cintron, Jose J Civ USAF AETC 325 CES/CEV
Subject: Alternate Drone Launch System at Tyndall AFB

Dear Mr. Cintron:

The Miccosukee Tribe of Indians of Florida received the Draft Environmental Assessment, Construction and Operation of an Alternate Drone Launch System at Tyndall Air Force Base. After consultation with Mr. Dayhoff and careful review of the documentation provided, the Tribe determined that there is no cultural, historical, or religious site of the Tribe at this location. This determination was based on the documentation provided by Department of the Air Force.

Thank you for consulting with us. Please call me at (305) 223-8380, Ext. 2244, if you require further information.

Steve Terry
NAGPRA & Section 106 Representative
Miccosukee Tribe
P.O. Box 440021
Miami, FL 33144-0021
(305) 223-8380, Ext. 2243
(305) 223-8380, Ext. 2243
Stevet@miccosukeetribe.com

Public Involvement

Florida Freedom Newspapers, Inc.

PUBLISHERS OF THE NEWS HERALD
Panama City, Bay County, Florida
Published Daily

State of Florida County of Bay

Before the undersigned authority appeared Glenda Sullivan, who on oath says that she is Classified In-Column Manager of The News Herald, a daily newspaper published at Panama City, in Bay County, Florida; that the attached copy of advertisement, being a Legal Advertisement - #6574 in the matter of Public Notice - Review of Environmental Assessment in the Bay County Court, was published in said newspaper in the issue of February 17, 2008

Affiant further says that The News Herald is a direct successor of the Panama City News and that this publication, together with its direct predecessor, has been continuously published in said Bay County, Florida, each day (except that the predecessor, Panama City News, was not published on Sundays), and that this publication together with its said predecessor, has been entered as periodicals matter at the post office in Panama City, in said Bay County, Florida, for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he or she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Glenda L. Sullivan

State of Florida
County of Bay

Sworn and subscribed before me this 18th day of February, A.D., 2008, by Glenda Sullivan, Classified In-Column Manager of The News Herald, who is personally known to me or has produced N/A as identification.



Marie L. Forrest
Notary Public, State of Florida at Large

6574 PUBLIC NOTICE

REVIEW OF ENVIRONMENTAL ASSESSMENT

The 325th Fighter Wing, Tyndall Air Force Base (AFB), has prepared a Draft Finding of No Significant Impact (FONSI) and supporting Draft Environmental Assessment (EA) for the construction and operation of an alternate drone launch system at Tyndall AFB. The purpose of the proposed action is to provide the 53rd Weapons Evaluation Group an alternate drone launch system at Tyndall AFB to alleviate the operational problems and reduce the high costs associated with the existing system. The Draft FONSI and EA have been prepared as part of the Air Force Environmental Impact Analysis Process (32 CFR 989) to satisfy the requirements of the National Environmental Policy Act of 1968. The Draft FONSI and EA are available for public review and comment beginning 17 February 2008 at the Bay County Public Library, located at 25 West Government Street, Panama City, Florida 32401, and at the 325th Fighter Wing Public Affairs Office, located at the address below. The comment period will close on 18 March 2008. Address written comments to the 325th Fighter Wing Public Affairs, 445 Suwannee Road, Suite 123, Tyndall AFB, Florida 32403; telephone: (850) 283-4500.
February 17, 2008